



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8**

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Ref: ENF-AT

**CAA-Inspection Report for
Public Service Company – Roundup Compressor Station**

I. General Information

Report Prepared By:	Emilio Llamozas
Date of Inspection:	September 15, 2005
Date of Report:	November 15, 2005 (I received additional data from the facility on October 13, 2005 which was used to finalize the report)
Type of Inspection:	FY05 EPA Lead/Full Compliance Evaluation
Names of Participants:	Emilio Llamozas, EPA Region 8 Scott Whitmore, EPA Region 8 Bob King, Xcel Energy Ron Wyatt, Working Foreman, Xcel Energy

II. Source Information

Company Name:	Public Service Company – Roundup Compressor Station
Plant Location:	3064 Road I Wiggins, Colorado 80654
Mailing Address:	P.O. Box 840, Denver CO 80201
Source Contacts:	Robert King, Environmental Coordinator (720) 497-2114
SIC Code/Description:	4922 Natural Gas Compressing and Processing
AFS Number:	08-087-00030
AFS Class:	A for NSPS, Title V, SIP and PSD. B for MACT
Local Non-Attainment:	None
Applicable Air Programs:	SIP, PSD, Title V, MACT Subpart HHH and NSPS KKK
State Permits:	Title V – 95OPMR081 (Last revised May 6, 2005).
Compliance Assistance:	None
Enforcement History:	No enforcement actions have been taken against this facility.

Description of Facility

This facility consists of three compressor engines for the storage, delivery, and transmission of natural gas. The natural gas processing plant uses a refrigerant compressor engine, two triethylene glycol dehydrators and one liquified petroleum gas (LPG) glycol plant. Fugitive VOC

emissions from equipment leaks are subject to New Source Performance Standards (NSPS). There is also a smart ash incinerator that can be moved to the Roundup facility to dispose of non-hazardous combustible waste.

III. Source Inspection

Date/Time: We arrived at the facility on September 15, 2005 at 9:00am.

Weather: Sunny

Entrance Interview

Upon entering the facility we did not observe any visible emissions. We held an entrance interview with Bob King and Ron Wyatt. We presented our EPA inspector credentials and explained the purpose of the inspection. We also explained that we wanted to start the inspection with a tour of the facility, followed by a review of the compliance records and finish the inspection with a closing conference.

On-site Inspection

Semi-Annual Monitoring Reports

Time Period	Due Date	Date Received
9/1/04 – 02/28/05	4/1/05	3/24/05
03/1/05 – 08/31/05	10/1/05	9/21/05

Annual Compliance Certification

Time Period	Due Date	Date Received
09/1/04 – 08/31/05	10/1/05	9/21/05

Roundup Compressor Station reported no deviations during the previous two Semi-Annual Monitoring Reports and certified continuous compliance in the Annual Compliance Certification.

Summary of Emission Units

The emissions units regulated by this permit are the following:

Emission Unit Number	AIRS Stack Number	Facility Identifier	Description	Pollution Control Device
E001	S001	E001	Ajax, Model DPC-280, 2-Cycle Lean Burn Internal Combustion Engine (Refrigerant Compressor Engine), Rated at 225 HP (Site), Serial No. 77939. Natural Gas Fired.	Uncontrolled
E002, E003 and E004	S004	E002, E003 and E004	Three (3) Waukesha, Model, L5790GSI, 4-Cycle Rich Burn Internal Combustion Engines (Compressor Engines), Each Rated at 980 HP (Site), Serial Nos. 397616, 397617 and 397618.	Uncontrolled
D001 and D002	S006	D001 and D002	Two (2) J. W. Williams, Triethylene Glycol Dehydrators, Model and Serial No. 801-1, Each Rated at 25 mmSCF/day.	Uncontrolled
D003	S007	D003	T. H. Russel, Model V-411, Ethylene Glycol Dehydrator, Serial No. Unavailable, Rated at 50 mmSCF/day.	Uncontrolled
F001	S002	F001	Fugitive VOC Emissions from Equipment Leaks	Uncontrolled
I001	N/A	I001	Elastec Inc., Smart Ash Energy Recovery Unit, Model No. 100, Serial No. Unavailable. Note this is a portable unit with an AIRS identification number of 7771171.	Uncontrolled

Specific Permit Terms

1. E001 - Ajax, Model DPC-280 Internal Combustion Engine

Parameter	Permit Condition Number	Limitations		Compliance Emission Factor (lbs/mmBtu)	Monitoring	
		Short Term	Long Term		Method	Interval
NO _x	1.1	N/A	26.4 tons/yr	3.17	Recordkeeping and Calculation	Monthly
CO		N/A	3.2 tons/yr	0.386		
Fuel Use	1.2	N/A	17.34 mmSCF/yr	N/A	Fuel Meter and Calculation	Monthly
Hours of Operation	1.3.	N/A	N/A	N/A	Recordkeeping	Monthly
Opacity	1.4.	Not to Exceed 20%		N/A	Fuel Restriction	Whenever Natural Gas is Used as Fuel

1.1 Nitrogen Oxide (NO_x) and Carbon Monoxide (CO) shall not exceed the limitations stated above (Colorado Construction Permit 92MR1345-1, as modified under the provisions of Section I, Condition 1.3, based on the requested emissions indicated on the APEN submitted May 23, 2003). The emission factors listed above (from AP-42, Section 3.2, dated July 2000, Table 3.2-1, 2-stroke lean burn engines) have been approved by the Division and shall be used in the following equation to calculate emissions:

$$\text{tons/month} = \frac{[\text{EF (lbs/MMBtu)} \times \text{fuel usage (MMscf/month)} \times \text{heat content of fuel (MMBtu/MMscf)}]}{2000 \text{ lbs/ton}}$$

The heat content of the gas to be used in this equation is the average annual heat content (lower heating value) of gas in Public Service Company's Northern Zone of distribution. The heat content of the gas in this zone is determined using the appropriate ASTM Methods or equivalent, if approved in advance by the Division.

The source provided records of the lower heating value of gas in Public Service Company's Northern Zone of distribution. The 2004 average lower heating value of gas in the Public Service Company's Northern Zone of distribution was 968 Btu/scf. The source is in compliance with this condition.

Emissions shall be calculated by the end of the subsequent month. A twelve-month rolling total shall be maintained to monitor compliance with annual limitations. Each month a new twelve month total shall be calculated using the previous twelve months data.

Roundup Compressor Station provided records of monthly emissions calculated using the emission factors stated above, fuel consumed per month, and the heat content of the fuel, as

required. The 12-month rolling totals of emissions and fuel consumption are summarized in Table 1 (Sep-04 through Aug-05). The source is in compliance with this condition.

Table 1. 12-Month Rolling totals of emissions and fuel consumption for engine E001 (Sep-04 through Aug-05)

Engine	Parameter	Reported Value	Permit Limit
E001 - Ajax, Model DPC-280 S/N 77939	NOx (tpy)	0.8	26.4
	CO (tpy)	0.1	3.2
	Fuel Consumption (mmscf/yr)	0.68	17.34
	Hours of Operation (hrs)	1,915	n/a

Figure 1. Photo of E001 - Ajax, Model DPC-280 Internal Combustion Engine Serial Number (S/N) 77939



1.2 Fuel consumption shall not exceed the limitations stated above (Construction Permit 92MR1345-1, as modified under the provisions of Section I, Condition 1.3, based on the requested fuel consumption rate indicated on the APEN submitted May 23, 2003). On the first working day of each month, facility-wide fuel use shall be recorded using existing fuel meters. Allocation of fuel use will be based on the engine design rate and hours of operation. Monthly fuel use shall be used in a twelve month rolling total to monitor compliance with annual limitations.

Roundup Compressor Station is keeping track of monthly fuel consumption for engine E001. Source is in compliance with 12-month rolling total fuel consumption limit as seen in Table 1.

1.3 Hours of Operation will be monitored monthly and recorded and maintained to be available to the Division on request. Hours of operation shall be used to allocate fuel use as indicated in Condition 1.2.

Roundup Compressor Station is keeping track of monthly hours of operation for Engine E001. From Sep-04 to Aug-05, Engine E001 operated for a total of 1915 hours. Fuel use for this engine is tracked with a dedicated, roots type fuel meter. Fuel usage is reported as 0.68 mmscf/yr from Sep-04 to Aug-05. The source is in compliance with this condition.

1.4 No owner or operator of a source shall allow or cause to be emitted into the atmosphere any air pollutant which is in excess of 20% opacity (Construction Permit 92MR1345-1). In the absence of credible evidence to the contrary, compliance with the 20% opacity requirement will be presumed whenever natural gas is used as fuel for this engine.

The engine was not operating during the inspection; however, no evidence was observed to indicate that the engine combusted fuel other than natural gas. Source is in compliance with this condition.

1.5 This engine shall be operated and maintained in accordance with manufacturer's recommendations and good engineering practices at all times, including periods of start-up, shutdown, and malfunction.

Mr. Wyatt affirmed that the engines are operated in accordance with manufacturer's recommendations and good engineering practices at all times. The Ajax was installed in 1991 and has not been changed since installation. The source is in compliance with this condition.

2. E002, E003 & E004 -Three (3) Waukesha, Model L5790GSI, Internal Combustion Engines

Parameter	Permit Condition Number	Limitations (Total)		Compliance Emission Factor (lbs/mmBtu)	Monitoring	
		Short Term	Long Term		Method	Interval
NO _x	2.1	N/A	137.2 tons/yr	2.27	Recordkeeping and Calculation	Monthly
CO		N/A	225 tons/yr	3.72		
Fuel Use	2.2	N/A	125.9 mmSCF/yr	N/A	Fuel Meter and Calculation	Monthly
Hours of Operation	2.3	N/A	N/A	N/A	Recordkeeping	Monthly
Opacity	2.4	Not to Exceed 20%		N/A	Fuel Restriction	Whenever Natural Gas is Used as Fuel

2.1 **Total** Nitrogen Oxide (NO_x), Carbon Monoxide (CO) and Volatile Organic Compound (VOC) emissions from these engines shall not exceed the limitations stated above (Colorado Construction Permit 95MR1037-3, as modified under the provisions of Section I, Condition 1.3, based on the requested emissions indicated in the APEN submitted May 23, 2003). Monthly emissions of each pollutant shall be calculated using the listed emission factors (from AP-42, July 2000, Section 3.2, Table 3.2-3, 4-Cycle Rich Burn Engines) in the following equation:

$$\text{tons/month} = \frac{[\text{EF (lbs/MMBtu)} \times \text{fuel usage (MMscf/month)} \times \text{heat content of fuel (MMBtu/MMscf)}]}{2000 \text{ lbs/ton}}$$

Figure 2. Photo of Engine E002 Waukesha, Model L5790GSI, Internal Combustion Engine S/N 397618



The heat content of the gas to be used in this equation is the average annual heat content (lower heating value) of gas in Public Service Company's Northern Zone of distribution. The heat content of the gas in this zone is determined using the appropriate ASTM Methods or equivalent, if approved in advance by the Division.

The source provided records of the lower heating value of gas in Public Service Company's Northern Zone of distribution. The 2004 average lower heating value of gas in the Public Service Company's Northern Zone of distribution was 968 Btu/scf. The source is in compliance with this condition.

Emissions shall be calculated by the end of the subsequent month. A twelve-month rolling total shall be maintained to monitor compliance with annual limitations. Each month a new twelve month total shall be calculated using the previous twelve months data.

Roundup Compressor Station provided records of monthly emissions calculated using the emission factors stated in the permit, fuel consumed per month, and the heat content of the fuel, as required. The 12-month rolling total of emissions and fuel consumption are summarized in Table 2 (Sep-04 through Aug-05). Appendix A contains 12-month rolling averages from August 2004 to September 2005 for each engine.

Table 2. 12-Month Rolling totals of emissions and fuel consumption for engine E002, E003 and E004 (Sep-04 through Aug-05)

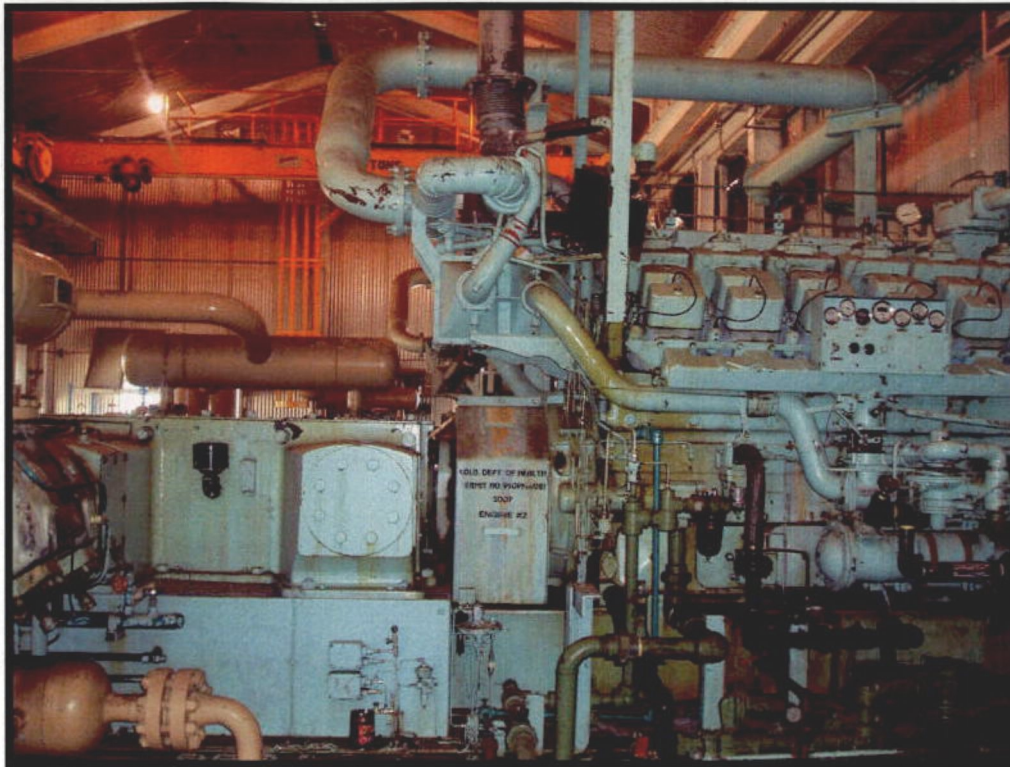
Engine	Parameter	Reported Value	Permit Limit
E002	NOx (tpy)	17.56	n/a
	CO (tpy)	28.79	n/a
	Fuel Consumption (mmscf/yr)	15.99	n/a
	Hours of Operation (hrs)	2,310	n/a
E003	NOx (tpy)	14.15	n/a
	CO (tpy)	23.19	n/a
	Fuel Consumption (mmscf/yr)	12.88	n/a
	Hours of Operation (hrs)	1,915	n/a
E004	NOx (tpy)	19.39	n/a
	CO (tpy)	31.78	n/a
	Fuel Consumption (mmscf/yr)	17.65	n/a
	Hours of Operation (hrs)	2,591	n/a
Total for three engines	NOx (tpy)	51.1	137.2
	CO (tpy)	83.7	225
	VOC (tpy)	0.7	n/a
	PM (tpy)	0.105	n/a
	Fuel Consumption (mmscf/yr)	46.5	125.9
	Hours of Operation (hrs)	6,816	n/a

Source is in compliance with these limits.

2.2 **Total** fuel consumption for these engines shall not exceed the limitations stated above (Colorado Construction Permit 95MR1037-3, as modified under the provisions of Section I, Condition 1.3, based on the requested fuel consumption rate indicated in the APEN submitted May 23, 2003). On the first working day of each month, facility-wide fuel use shall be recorded using existing fuel meters. Allocation of fuel use will be based on engine design rates and hours of operation. Monthly fuel use shall be used in a twelve month rolling total to monitor compliance with annual limitations.

Roundup Compressor Station is keeping track of monthly fuel consumption and hours of operation for engines E002, E003 and E004. Source is in compliance with 12-month rolling total fuel consumption limit as seen in Table 2.

Figure 3. Photo of Engine E003 Waukesha, Model L5790GSI, Internal Combustion Engine S/N 397616



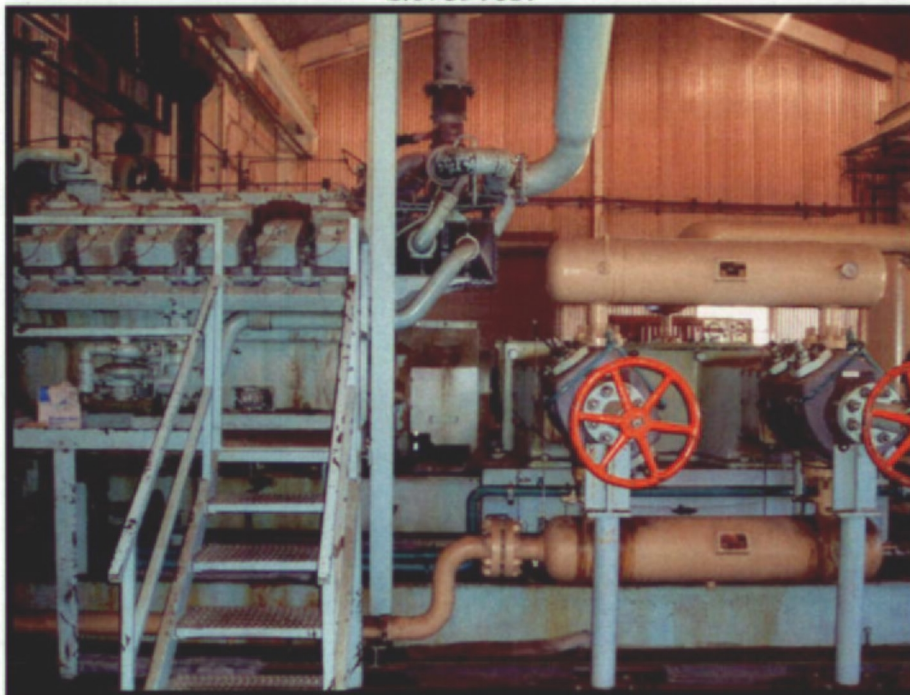
2.3 **Total** Hours of Operation for these engines will be monitored monthly and recorded and maintained to be available to the Division upon request. Hours of operation shall be used to allocate fuel use as indicated in Condition 2.2.

Fuel use for engines E002, E003 and E004 (plus mainline heaters) are tracked with a single fuel meter. Roundup Compressor Station is keeping track of monthly hours of operation for Engines E002, E003 and E004. From Sep-04 through Aug-05 the engines operated for a combine total of 6,816 hours. Allocation of fuel use is based on engine design rates and hours of operation. Fuel usage for the engines E002, E003 and E004 is reported as a combined total of 46.5 mmscf/yr from Sep-04 to Aug-05 as shown in Table 2. The source is in compliance with this condition.

2.4 No owner or operator of a source shall allow or cause to be emitted into the atmosphere any air pollutant which is in excess of 20% opacity (Colorado Construction Permit 95MR1037-3). This opacity standard applies to **each engine**. In the absence of credible evidence to the contrary, compliance with the 20% opacity requirement will be presumed whenever natural gas is used as fuel for these engines.

Engine E002 was not operating during the inspection; however, no evidence was observed to indicate that the engine combusted fuel other than natural gas. Engines E003 and E004 were in operation at the time of the inspection and no visible emissions were present. The source is in compliance with this condition.

Figure 4. Photo of Engine E004 Waukesha, Model L5790GSI, Internal Combustion Engine S/N 397617



2.5 These engines shall be operated and maintained in accordance with manufacturer's recommendations and good engineering practices at all times, including periods of start-up, shutdown, and malfunction.

Mr. Wyatt affirmed that the engines are operated and maintained in accordance with the manufacturer's recommendations and good engineering practices. The Waukesha engines are given a top end overhaul at approximately 20,000 hours with a complete re-build being performed every 40,000 hours. Source is in compliance with this condition. Engine E002 was not operating during the inspection. The observed operating parameters on the engines during the inspection were the following:

Engine, AIRS Point ID	Engine Parameters		Compressor Parameter	
	RPM	1000	First Suction	640 psi
	Pre Catalyst Temp	Uncontrolled Engine	First Discharge	940 psi
	Post Catalyst Temp		Second Discharge	1620 psi

Engine, AIRS Point ID	Engine Parameters		Compressor Parameter	
	RPM	885	First Suction	640 psi
	Pre Catalyst Temp	Uncontrolled Engine	First Discharge	940 psi
	Post Catalyst Temp		Second Discharge	1560 psi

3. D001 & D002, Two (2) J. W. Williams Triethylene Glycol Dehydration Units

Parameter	Permit Condition Number	Limitations (Total)		Compliance Emission Factor	Monitoring	
		Short Term	Long Term		Method	Interval
VOC	3.1	N/A	28 tons/yr	Based on input to GLYCalc Version 4.0 or Higher	Parametric	Monthly
Extended Gas Analysis	3.2	N/A	N/A	N/A	Laboratory Analysis	Semi-Annually
Operating Days	3.3	N/A	N/A	N/A	Recordkeeping	Monthly
Natural Gas Processed	3.4	N/A	18,250 mmSCF/yr	N/A	Flow Meter and Calculation	Monthly

3.1 **Total** Volatile Organic Compound emissions for these units shall not exceed the limitations stated above (Colorado Construction permit 95MR1037-1, as modified under the provisions of Section I, Condition 1.3). Emissions of Volatile Organic Compounds and Hazardous Air Pollutants will be calculated monthly using the Gas Research Institute's GLYCalc (Version 4.0 or higher) Model. Parametric monitoring of the natural gas throughput, triethylene glycol recirculation rate, and inlet gas pressure and temperature and quantity/source of stripping gas used will be monitored to verify input to this model. Recording interval for these parameters will be on a monthly basis. Values shall be representative of how the units operated during the period. Monthly calculation of emissions using GLYCalc Version 4.0 or higher will be conducted by the end of the subsequent month utilizing the gas data from the last analysis conducted and representative parameters. Monthly emissions of VOCs will be used in a rolling twelve month total to monitor compliance with the annual limitation.

Roundup Compressor Station is keeping track of all required parameters for both Triethylene Glycol Dehydration Units (D001 and D002). The facility is calculating monthly VOC emissions using GLYCalc Version 4.0 or higher by the end of the subsequent month utilizing the gas data from the last analysis conducted and representative parameters. VOC emissions were reported as 2.9 tons for reporting period September 2004 to August 2005; permit limit is set as 28 tons per year. Source is in compliance with this condition.

3.2 During the withdrawal cycle, samples of inlet gas shall be collected and analyzed (extended gas analysis) to determine C₁ to C₆, n-hexane, and benzene, toluene, ethyl benzene and total xylene (BTEX). An annual gas analysis is required within one month of withdrawing gas from storage. The latest gas analysis required by either this Condition or Condition 4.2 shall be used in the GLYCalc model run.

According to Mr. King the gas withdrawing cycle begins in December and usually ends in May. According to Mr. King, the natural gas that is withdrawn is sent either to Xcel's Brush facility or to Denver. The natural gas withdrawal began December 1, 2004. Roundup Compressor Station was supposed to perform an extended gas analysis within one month of withdrawing gas from storage which would have been by January 1, 2005. The extended natural gas analysis was performed on February 12, 2005.

3.3 The **total** number of Operating Days for these units will be monitored monthly and recorded and maintained to be available to the Division upon request. The total number of Operating Days will be used to determine an average daily natural gas processing rate to be used in the monthly GLYCalc run.

The combined total operating days for these units (D001 and D002) for the reporting period September 2004 to August 2005 was 242.66 days. The source is in compliance with this condition.

Figure 5. D001 & D002, Two (2) J. W. Williams Triethylene Glycol Dehydration Units



3.4 The **total** gas processed by these triethylene glycol dehydration units shall not exceed the limitations listed above (Colorado Construction Permit 95MR1037-3, as modified under the provisions of Section I, Condition 1.3). The gas throughput to the dehydration units shall be determined and recorded monthly using the existing flow meter for the facility as well as other operational parameters and records. All records and data shall be made available to the Division upon request. Records should include information such as downtime for the units and gas either

by-passed through the units or consumed by fuel-burning equipment. A twelve month rolling total will be maintained to monitor compliance with annual emission limitations.

Roundup Compressor Station is keeping records of natural gas throughput to the dehydration units. Combined total natural gas processed by dehydration units D001 and D002 was reported as 2,004 mmscf/yr for the reporting period September 2004 to August 2005. This is in compliance with the natural gas processed limit of 18,250 mmscf/yr.

3.5 These units shall be operated and maintained in accordance with manufacturer's recommendations and Public Service Company's operating experience at all times, including periods of start-up, shutdown, and malfunction.

Mr. Wyatt stated that the Triethylene Glycol Dehydration Units (D001 and D002) are operated and maintained in accordance with manufacturer's recommendations. The source is in compliance with this condition.

4. D003 - T. H. Russel, Model V-411, Ethylene Glycol Dehydration Unit

Parameter	Permit Condition Number	Limitations		Compliance Emission Factor	Monitoring	
		Short Term	Long Term		Method	Interval
VOC	4.1	N/A	16 tons/yr	Based on input to GLYCalc Version 4.0 or Higher	Parametric	Monthly
Extended Gas Analysis	4.2	N/A	N/A	N/A	Laboratory Analysis	Semi-Annually
Ethylene Glycol Consumption	4.3	N/A	N/A	N/A	Recordkeeping	Annually
Operating Days	4.4	N/A	N/A	N/A	Recordkeeping	Monthly
Natural Gas Consumption	4.5	N/A	18,250 mmSCF/yr	N/A	Flow Meter and Calculation	Monthly

4.1 Volatile Organic Compound emissions for this unit shall not exceed the limitations stated above (Colorado Construction Permit 95MR1037-2, as modified under the provisions of Section I, Condition 1.3). Emissions of Volatile Organic Compounds and Hazardous Air Pollutants will be calculated monthly using the Gas Research Institute's GLYCalc (Version 4.0 or higher) Model. Parametric monitoring of the natural gas throughput, ethylene glycol recirculation rate, inlet gas pressure and temperature, cold separator temperature and pressure and flash tank temperature and pressure will be monitored to verify input to this model. Recording interval for

these parameters will be on a monthly basis. Values shall be representative of how the unit operated during the period. Monthly calculation of emissions using GLYCalc Version 4.0 or higher will be conducted by the end of the subsequent month utilizing the gas data from the last analysis conducted and representative parameters. Monthly emissions of VOCs will be used in a rolling twelve month total to monitor compliance with the annual limitation.

Roundup Compressor Station is keeping track of all required parameters for the Ethylene Glycol Dehydration Unit. Roundup is calculating monthly VOC emissions using GLYCalc Version 4.0 or higher by the end of the subsequent month utilizing the gas data from the last analysis conducted and representative parameters. VOC emissions were reported as 0.9 tons for reporting period September 2004 to August 2005; permit limit is set as 16 tons per year. Source is in compliance with this condition.

Figure 6. D003 - T. H. Russel, Model V-411, Ethylene Glycol Dehydration Unit



4.2 During the withdrawal cycle, samples of inlet gas shall be collected and analyzed (extended gas analysis) to determine C₁ to C₆, n-hexane, and benzene, toluene, ethyl benzene and total xylene (BTEX) composition. An annual gas analysis is required within one month of bringing the ethylene glycol dehydrator on line. The latest gas analysis will be used in the GLYCalc model run to determine monthly emissions.

The extended natural gas analysis was performed on February 12, 2005. The ethylene glycol dehydrator was brought on line on January 12, 2005. The source is in compliance with this condition.

4.3 Ethylene Glycol Consumption will be monitored and recorded annually. Ethylene glycol emissions are subject to Recordkeeping and Reporting requirements listed under General Condition 22 and Fee Payment listed under General Condition 8.

Ethylene glycol consumption was reported as 0 gallons for the operating period from September 2004 to August 2005. The source is in compliance with this condition.

4.4 The number of Operating Days for this unit will be monitored monthly and recorded and maintained to be available to the Division upon request. The number of Operating Days will be used to determine an average daily natural gas processing rate to be used in the monthly GLYCalc run.

The total number of operating days reported for this unit was 82.33 days for the reporting period September 2004 to August 2005. The source is in compliance with this condition.

4.5 The gas processed by this ethylene glycol dehydration unit shall not exceed the limitations listed above (Colorado Construction Permit 95MR1037-3, as modified under the provisions of Section I, Condition 1.3). The gas throughput to the dehydration unit shall be determined and recorded monthly using the existing flow meter for the facility as well as other operational parameters and records. All records and data shall be made available to the Division upon request. Records should include information such as downtime for the unit and gas either by-passed through the unit or consumed by fuel-burning equipment. A twelve month rolling total will be maintained to monitor compliance with annual emission limitations.

Roundup Compressor Station is keeping records of gas throughput to the Ethylene Glycol dehydration unit. Total natural gas processed by dehydration unit D003 was reported as 1,421 mmscf/yr for the reporting period September 2004 to August 2005. This is in compliance with the natural gas processed limit of 18,250 mmscf/yr.

4.6 This unit shall be operated and maintained in accordance with manufacturer's recommendations and good engineering practices at all times, including periods of start-up, shutdown, and malfunction.

Mr. Wyatt affirmed that the Ethylene Glycol Dehydration Unit (D003) is operated and maintained in accordance with manufacturer's recommendations. The source is in compliance with this condition.

5. F001 - Fugitive VOC Emissions from Equipment Leaks

Parameter	Permit Condition Number	Limitations		Compliance Emission Factor	Monitoring	
		Short Term	Long Term		Method	Interval
General Provisions	5.1	N/A	N/A	N/A	Subject to NSPS General Provisions	Subject to NSPS General Provisions
Leak Detection and Repair	5.2	N/A	N/A	N/A	Subject to NSPS KKK	Subject to NSPS KKK
VOC Emissions	5.3.	N/A	N/A	See Condition 5.3.	Recordkeeping and Calculation	As Necessary

5.1 Regulation No. 6, Part A, Subpart A, General Provisions applies as follows (Colorado Construction Permit 92MR1345-2):

5.1.1 No article, machine, equipment or process shall be used to conceal an emissions which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gasses discharged to the atmosphere. (§ 60.12)

5.1.2 Records of startups, shutdowns, and malfunctions shall be maintained, as required under § 60.7.

Roundup provided records of startups, shutdowns and malfunctions. The source is in compliance with this condition.

5.2 This source is subject to 40 CFR Part 60.630, Subpart KKK, New Source Performance Standards, as adopted by reference in Colorado Regulation 6, Part A: Standards of Performance for Equipment Leaks of VOC from Onshore Natural Gas Processing Plants (Colorado Construction Permit 92MR1345-2). The following items apply:

5.2.1 Inspection and maintenance requirements as stated in federal NSPS 40 CFR § 60.632, § 60.633, and § 60.634.

5.2.2 Record keeping requirements as stated in federal NSPS 40 CFR § 60.635.

5.2.3 Reporting requirements as stated in federal NSPS 40 CFR § 60.636. Reporting under this section is to be fulfilled concurrently with Appendix B monitoring and permit deviation reporting and shall be submitted to the Division.

Roundup is in compliance with all NSPS Subpart KKK requirements. Roundup submitted the Semi-Annual Volatile Organic Compound Monitoring Report on September 21, 2005. During the reporting period (March 1, 2005 to August 31, 2005), there were no leaking valves detected at the Roundup Compressor Station.

5.3 Fugitive VOC emissions from equipment leaks are subject to the General Conditions in Section IV of this Permit, including Recordkeeping and Reporting requirements listed under Condition 22 and Fee Payment under Condition 8. Emissions shall be calculated, as necessary, to comply with the requirements in Section IV.8 and IV.22 of this permit. The methodology used to calculate emissions shall be documented and made available to the Division upon request.

6. I001 - Elastec Inc., Smart Ash Energy Recovery Unit

Parameter	Permit Condition Number	Limitations		Compliance Emission Factor	Monitoring	
		Short Term	Long Term		Method	Interval
PM	6.1.	N/A	0.03 tons/yr	5.3 lbs/ton burned	Recordkeeping and Calculation	Monthly
PM ₁₀			0.03 tons/yr	5.3 lbs/ton burned		
SO ₂			0.01 tons/yr	2.5 lbs/ton burned		
NO _x			0.01 tons/yr	2.0 lbs/ton burned		
VOC			0.08 tons/yr	15 lbs/ton burned		
CO			0.10 tons/yr	20 lbs/ton burned		
Quantity of Waste Burned	6.2.	50 lbs/hr	10 tons/yr	N/A	Recordkeeping and Calculation	Per Charge, Daily
Particulate Matter	6.3.	0.10 gr/dSCF corrected to 12% CO ₂ - State Only		N/A	Demonstrated Compliance with Conditions 6.2, 6.5 and 6.6.	
		0.15 gr/dSCF corrected to 12% CO ₂				
Hours of Operation	6.4.	N/A	N/A	N/A	Recordkeeping	Daily
Waste Burning Requirements	6.5.	See Condition 6.5.		N/A	Recordkeeping	Per Charge
Incinerator Operating Requirements	6.6.	See Condition 6.6.		N/A	See Condition 6.6.	
State-Only - NSPS Subpart A General Provisions	6.7.	N/A	N/A	N/A	As Required by NSPS General Provisions	Subject to NSPS General Provisions
Opacity	6.8.	Not to Exceed 20%		N/A	See Condition 6.8	

6.1 Emissions of air pollutants shall not exceed the above limitations (Colorado Construction Permit 97PO0846, as modified under the provisions of Section I, Condition 1.3). Compliance with these limitations shall be monitored by calculating emissions monthly using the above emission factors (FIRE, Version 5.0, Source Classification Codes and Emission Factor Listing

for Criteria Air Pollutants, EPA-454/R-95-012, dated August 1995, SCC 5-03-001-02) in the following equation:

$$\text{tons/month} = \frac{\text{EF (lbs/ton waste burned)} \times \text{monthly quantity of waste burned (tons/month)}}{2000 \text{ lbs/ton}}$$

Table 3. Smart Ash Energy Recovery Unit monthly emissions and hours of operation.

Month	PM Emissions (tons)	Waste burned (tons)	Hours of Operation (hours)
September 2004	0.0001	0.02	5.00
October 2004	0.0001	0.04	7.00
November 2004	0.0001	0.05	10.00
December 2004	0.0001	0.05	10.00
January 2005	0.0000	0.00	0.00
February 2005	0.0000	0.00	0.00
March 2005	0.0001	0.04	7.00
April 2005	0.0000	0.00	0.00
May 2005	0.0002	0.09	17.00
June 2005	0.0000	0.01	2.00
July 2005	0.0000	0.00	0.00
August 2005	0.0000	0.00	0.00
12-Month Total	0.001 tons/yr	0.29 tons/yr	58.00 hrs

Monthly emissions shall be used in a twelve month rolling total to monitor compliance with the annual emission limitations. Each month a new twelve month total shall be calculated using the previous twelve months data.

Figure 7. I001 - Elastec Inc., Smart Ash Energy Recovery Unit



6.2 The quantity of waste burned in the incinerator shall not exceed the above limitations (Colorado Construction Permit 87PO0846). Compliance with the above limitation shall be monitored by recording the weight of waste burned in each charge. A daily total of waste burned shall be calculated based on the records of material charged (Colorado Regulation No. 6, Part B, Section VII.D and Colorado Construction Permit No. 87PO0846). Daily totals shall be summed to obtain a monthly quantity of waste burned. The monthly total shall be used in a twelve month rolling total to monitor compliance with the annual limitations. Each month a new twelve month rolling total shall be calculated using the previous twelve months data. Compliance with the hourly charge limit shall be monitored by dividing the daily quantity of material burned by the hours of operation, as required by Condition 6.4.

Roundup Compressor Station is recording the quantity of waste burned in each charge as well as the daily, monthly and 12-month rolling total of waste burned in the Smart Ash Incinerator. Mr. Wyatt weighs the waste before burning it and keeps a record of waste burned each day. Roundup is also in compliance with the hourly charge limit of 50 lbs/hr. The highest waste hourly charge from September 2004 to August 2005 was 11.42 lb/hr.

6.3 Particulate matter emissions from the incinerator are limited to the following:

6.3.1 **State-Only Requirement:** Particulate matter emissions shall not exceed 0.10 gr/dSCF corrected to 12% CO₂ (Colorado Regulation No. 6, Part B, Section VII.C.2 and Colorado Construction Permit No. 87PO0846).

6.3.2 Particulate matter emissions shall not exceed 0.15 gr/dSCF corrected to 12% CO₂ (Colorado Regulation No. 1, Section III.B.2.b).

6.3.3 In the absence of credible evidence to the contrary, compliance with the particulate matter emission limits shall be presumed if the permittee meets the requirements in Conditions 6.2, 6.5 and 6.6.

Stack testing has been done on a representative unit and has served for compliance for all Smart-Ash Incinerator units. The source is in compliance with this condition.

6.4 Hours of Operation of the incinerator shall be recorded daily (Colorado Regulation No. 6, Part B, Section VII.D and Colorado Construction Permit No. 87PO0846). Hours of operation shall be used to calculate the hourly rate of waste burned in the incinerator as described in Condition 6.2.

Total hours of operation were reported as 58 hours for the period of September 2004 to August 2005. Roundup Compressor Station is also in compliance with the hourly charge limit of 50 lbs/hr. The highest waste hourly charge from September 2004 to August 2005 was 11.42 lb/hr. The source is in compliance with this condition.

6.5 The Waste Burned in this incinerator is subject to the following requirements:

6.5.1 Waste burned in this unit shall consist of dry waste consisting of materials such as paper, cardboard, oily absorbent materials and oil contaminated filters. No other type of waste shall be burned in this unit without prior approval from the Division (Colorado Construction Permit 97PO0846).

6.5.2 Absorbent materials that contain volatile liquids, such as gasoline or paint thinner shall not be burned in this unit. Waste material shall not contain or be contaminated with liquids with a flash point less than 100° F (Colorado Construction Permit 97PO0846, as modified under the provisions of Section I, Condition 1.3).

6.5.3 No radioactive or hazardous waste materials of any type shall be burned in this unit (Colorado Construction Permit 97PO0846).

Compliance with the above requirements shall be monitored by recording, for each charge, a description of the waste burned (i.e. paper, filters) and identifying any chemical contaminants (i.e. oil, grease) contained in or on the materials burned. In the absence of credible evidence to the contrary, compliance with Condition 6.5.2 shall be presumed provided the liquid contaminants in or on the waste have a flash point higher than 100° F.

According to Mr. Wyatt, spent oil filters, oily rags, paper and pig socks are the only wastes burned in the Smart Ash Incinerator. The source is in compliance with this condition.

6.6 The Operation of this incinerator is subject to the following requirements:

6.6.1 The combustion chamber (55-gallon drum) shall not be overloaded with waste materials. Ample head room must be provided to encourage good start-up and efficient burning (Colorado Construction Permit 97PO0846). Compliance with this requirement shall be monitored by complying with the hourly waste burning limits in Condition 6.2.

6.6.2 Liquid fuel shall not be used as a start-up fuel. An ample layer of dry paper or cardboard material supplies a fast, easy initial fuel source for start-up (Colorado Construction Permit 97PO0846). Compliance with this requirement shall be monitored by complying with the requirements in Condition 6.5.2.

6.6.3 This unit shall be maintained and operated in accordance with manufacturer's operating instructions (Colorado Construction Permit 97PO0846). A copy of the manufacturer's operating and maintenance instructions shall be maintained on site and made available to the Division upon request.

6.6.4 This unit shall be operated by trained personnel who are competent and knowledgeable of the unit's operating instructions and maintenance procedures (Colorado Construction Permit 97PO0846). Compliance with this requirement shall be monitored by maintaining records of personnel trained to operate the incinerator. The name of the personnel operating the incinerator will be recorded for each charge of waste fed to the incinerator. These records shall be made available to the Division upon request.

Mr. Wyatt received incinerator operation training from the Smart Ash Incinerator manufacturer. Mr. Wyatt provides incinerator operation training to Roundup employees. According, to Mr. Wyatt they operate the unit in accordance with manufacturer's operating instructions. The source is in compliance with this condition.

6.7 **State-Only Requirement:** This incinerator is subject to 40 CFR Part 60, Subpart A - General Provisions, as adopted by reference in Colorado Regulation No. 6, Part B, Section I.A. Specifically, this incinerator is subject to the following requirements:

6.7.1 No article, machine, equipment or process shall be used to conceal an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gasses discharged to the atmosphere (40 CFR Part 60 Subpart A § 60.12, as adopted by reference in Colorado Regulation No. 6, Part B, Section I.A)

6.7.2 At all times, including periods of startup, shutdown, and malfunction owners and operators shall to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on

information available to the Division which may include, but is not limited to monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source (Colorado Construction Permit 97PO0846 and 40 CFR Subpart A § 60.11(d), as adopted by reference in Colorado Regulation No. 6, Part B, Section I.A).

The source is in compliance with this condition.

6.8 No owner or operator of a source shall allow or cause to be emitted into the atmosphere any air pollutant which is in excess of 20% opacity (Colorado Regulation No. 1, Section II.A.1). Compliance with the Opacity requirement shall be monitored by conducting a visual observation of the incinerator during each use. If any visible emissions are observed, the source shall investigate the incinerator performance and make any adjustments necessary. A log of any adjustments shall be maintained and made available to the Division upon request. If, after the adjustment has been performed, visible emissions persist for longer than one hour, an EPA Reference Method 9 opacity observation shall be performed to determine compliance with the opacity standard. The EPA Reference Method 9 opacity observations shall be performed by an observer with current and valid Method 9 certification.

Visual emissions from this unit are negligible, according to Mr. Wyatt.

7. Natural Gas Transmission and Storage MACT Requirements

7.1 The owner of operator shall maintain records of the annual facility natural gas throughput each year and upon request, submit such records to the Division. If the facility annual natural gas throughput increases above the maximum natural gas throughput calculated in 40 CFR Part 63, Subpart HHH §§ 63.1270(a)(1) or (a)(2), the maximum natural gas throughput must be recalculated using the higher throughput multiplied by a factor of 1.2 (40 CFR Part 63 Subpart HHH § 63.1270(a)(3), as adopted by reference in Colorado Regulation No. 8, Part E, Section III).

7.2 A facility that is determined to be an area source, based on emissions estimated using the maximum natural gas throughput calculated as specified in 40 CFR Part 63 Subpart HHH §§ 63.1270(a)(1) or (a)(2), but subsequently increases emissions or potential to emit above the major source levels (without first obtaining and complying with other limitations to keep its potential to emit HAP below major source levels), and becomes a major source, must comply thereafter with all applicable provisions of 40 CFR Part 63 Subpart HHH on the applicable compliance dates specified in 40 CFR Part 63 Subpart HHH § 63.1270(d) (40 CFR Part 63 Subpart HHH § 63.1270(a), as adopted by reference in Colorado Regulation No. 8, Part E, Section III).

According to Mr. King nothing has changed since the last MACT HHH potential to emit determination which found that the facility was below the MACT major source threshold. Roundup Compressor Station is maintaining records of annual facility natural gas throughput each year. From September 2004 to August 2005 the facility process 2,004 mmscf of natural gas which is below the natural gas throughput limit of 6,840 mmscf used in the MACT potential to emit determination. Therefore, Roundup Compressor Station is considered to be an area source for the HHH MACT. The source is in compliance with this condition.

Exit Interview

At the end of the inspection we met with Mr. King and Mr. Wyatt to perform an exit interview. Mr. King committed to send the following documents: Heat content of natural gas for the Northern Zone, Operating parameters for the TEG (D001 and D002) and EG (E003) dehydrators, operating times for engine E001. I received this information via letter on September 21, 2005.

IV. Finding and Recommendations

Based on observations made during the inspection, information provided by the source, an evaluation of emission records, and a review of Division documentation Public Service Company, Roundup Compressor Station is determined to be in compliance with all the conditions outlined in Operating Permit 95OPMR081, except that Roundup was supposed to perform an extended gas analysis within one month of withdrawing gas (December 1, 2004) from storage which would have been by January 1, 2005. The extended natural gas analysis was performed on February 12, 2005 (a month in a half late).



Colorado Department of Public Health and Environment

Air Pollution Control Division

Inter-Office Memorandum

TO: FILE

FROM: Jackie Joyce ⁵²

DATE: September 25, 2003

RE: Public Service Co – Roundup Compressor Station, FID # 0870030, OP # 95OPMR081

SUBJECT: MACT Status for Roundup Compressor Station

The purpose of the memorandum is to address the MACT status of the PSCo – Roundup facility.

The source submitted an initial notification on June 16, 2000, indicating that the facility was subject to the requirements in 40 CFR Part 63 Subpart HHH (Natural Gas Transmission and Storage MACT) and that the dehydrators were exempt from the control requirements under 40 CFR Part 63 Subpart HHH § 63.1274(d), because actual uncontrolled benzene emissions are less than 1 ton per year. In their May 23, 2003 comments on the draft renewal permit, the source indicated that they had made some errors when these units were first permitted and that the potential to emit of HAPS from the facility was really below the major source level (10 tons/yr of any individual HAP and 25 tons/yr of combined HAPS). The Natural Gas Transmission and Storage MACT allows the potential to emit for glycol dehydrators to be based on maximum actual levels, rather than design levels. In the May 23, 2003 analysis, the source used the actual maximum values for the glycol circulation rate and the BTEX content of the gas to calculate emissions from the dehydrators, although they used the design natural gas processing rate (8760 hrs/yr and 25 mmSCF/day). However, the May 23, 2003 submittal did not include the actual average values for other GLYCalc parameters and the source resubmitted their dehydrator emissions in their June 11, 2003 e-mail. In this analysis, the source used the maximum actual value for glycol recirculation rate and BTEX content of the gas, the average actual values for the other GLYCalc parameters, and the lower hours of operation as allowed by 40 CFR Part 63 Subpart HHH § 63.1270(a)(1). Based on the June 11, 2003, HAP emissions from the Roundup facility are below the major source level, therefore, the requirements in 40 CFR Part 63 Subpart HHH do not apply. However, since the facility is determined to be a minor source using the actual maximum gas throughput rate, rather than design, the provisions in 40 CFR Part 63 Subpart HHH § 63.1270(a)(3) to retain the maximum natural gas throughput rate and recalculate emissions if that value is exceeded were included in the renewal permit.

Note that although the facility has been determined to be a minor source for HAPS for purposes of the Natural Gas Transmission and Storage MACT, the source may still be subject to the case-by-case MACT provisions in Section 112(j) of the Clean Air Act. The facility has reciprocating internal combustion engines (RICE), which are one of the source categories for which EPA failed to promulgate MACT standards by the deadline and so the provisions in 112(j) potentially apply to the facility. The source submitted a Part 1 application prior to the May 15, 2002 deadline and the Part 1 notification indicated that the facility was a major source for HAPS, although the source also indicated that they needed help determining applicability. The proposed rule for the RICE MACT in 40 CFR Part 63 Subpart ZZZZ does not appear to allow the potential to emit from the glycol dehydrators to be

based on levels below design rate and at design rate, the facility would be major for HAPS. Therefore, the permit includes provisions for the case-by-case MACT requirements of 112(j).

However, it should be noted that the final MACT rule for the combustion turbines (40 CFR Part 63 Subpart YYYYY) was signed on August 29, 2003. In this final rule, the definition of "potential to emit" has been revised to allow sources subject to 40 CFR Part 63 Subpart HHH to use the maximum annual facility gas throughput for storage and transmission facilities based on the provisions in 40 CFR Part 63 Subpart HHH §§ 63.1270(a)(1) and (2). The Division would expect and EPA has verbally confirmed that the definition of "potential to emit" in the final RICE MACT rule will be revised to contain similar language. If upon promulgation of the final RICE MACT, the Roundup facility is no longer major for HAPS and the Division agrees, the 112(j) case-by-case MACT provisions can be removed from the permit via the minor permit modification procedures in Colorado Regulation No. 3, Part C.

09/14/2005

02:21PM

Public Service Company of Colorado

Criteria Emissions Summary Report

Roundup Compressor Station

12 month rolling

From: <i>Sep 1</i>	<u>PM</u>	<u>PM10</u>	<u>SO2</u>	<u>NOX</u>	<u>VOC</u>	<u>CO</u>
To: 09/01/2004	(tons)	(tons)	(tons)	(tons)	(tons)	(tons)
<i>Aug 31</i>						
Dehydrator #D001-D002					2.9	
Dehydrator #D003					0.9	
GasComp#1-3 (E002-E004)	0.105	0.105	0.014	51.1	0.7	83.7
PropaneCompressor(E001)	0.002	0.002	0.000	0.8	0.1	0.1
Smart Ash Energy Recovery Unit	0.001	0.001	0.000	0.0	0.0	0.0
Total	<u>0.1069</u>	<u>0.107</u>	<u>0.015</u>	<u>51.9</u>	<u>4.6</u>	<u>83.8</u>

* - Zero value

** - Less than .1 and greater than zero

09/14/2005
02:22PM

Public Service Company of Colorado

Criteria Emissions Summary Report

Roundup Compressor Station

08/01/2004 to 08/01/2005

	<u>PM</u> <u>(tons)</u>	<u>PM10</u> <u>(tons)</u>	<u>SO2</u> <u>(tons)</u>	<u>NOX</u> <u>(tons)</u>	<u>VOC</u> <u>(tons)</u>	<u>CO</u> <u>(tons)</u>
Dehydrator #D001-D002					2.9	
Dehydrator #D003					0.9	
GasComp#1-3 (E002-E004)	0.111	0.111	0.015	54.1	0.7	88.6
PropaneCompressor(E001)	0.002	0.002	0.000	0.8	0.1	0.1
Smart Ash Energy Recovery Unit	0.001	0.001	0.000	0.0	0.0	0.0
Total	<u>0.1131</u>	<u>0.113</u>	<u>0.015</u>	<u>54.8</u>	<u>4.7</u>	<u>88.7</u>

* - Zero value

** - Less than .1 and greater than zero

09/14/2005

02:23PM

Public Service Company of Colorado

Criteria Emissions Summary Report

Roundup Compressor Station

From:	<u>PM</u>	<u>PM10</u>	<u>SO2</u>	<u>NOX</u>	<u>VOC</u>	<u>CO</u>
To:	<u>(tons)</u>	<u>(tons)</u>	<u>(tons)</u>	<u>(tons)</u>	<u>(tons)</u>	<u>(tons)</u>
07/01/2004						
07/01/2005						
Dehydrator #D001-D002					2.9	
Dehydrator #D003					0.9	
GasComp#1-3 (E002-E004)	0.116	0.116	0.015	56.6	0.7	92.8
PropaneCompressor(E001)	0.002	0.002	0.000	0.8	0.1	0.1
Smart Ash Energy Recovery Unit	0.001	0.001	0.001	0.0	0.0	0.0
Total	<u>0.1186</u>	<u>0.119</u>	<u>0.016</u>	<u>57.4</u>	<u>4.7</u>	<u>92.9</u>

* - Zero value

** - Less than .1 and greater than zero

09/14/2005
02:24PM

Public Service Company of Colorado

Criteria Emissions Summary Report

Roundup Compressor Station

From: 06/01/2004	<u>PM</u>	<u>PM10</u>	<u>SO2</u>	<u>NOX</u>	<u>VOC</u>	<u>CO</u>
To: 06/01/2005	(tons)	(tons)	(tons)	(tons)	(tons)	(tons)
Dehydrator #D001-D002					2.9	
Dehydrator #D003					0.9	
GasComp#1-3 (E002-E004)	0.116	0.116	0.015	56.7	0.7	92.9
PropaneCompressor(E001)	0.002	0.002	0.000	0.8	0.1	0.1
Smart Ash Energy Recovery Unit	0.001	0.001	0.001	0.0	0.0	0.0
Total	0.1188	0.119	0.016	57.5	4.7	93.0

* - Zero value

** - Less than .1 and greater than zero

09/14/2005

02:24PM

Public Service Company of Colorado

Criteria Emissions Summary Report

Roundup Compressor Station

From: 05/01/2004	<u>PM</u>	<u>PM10</u>	<u>SO2</u>	<u>NOX</u>	<u>VOC</u>	<u>CO</u>
To: 05/01/2005	(tons)	(tons)	(tons)	(tons)	(tons)	(tons)
Dehydrator #D001-D002					4.2	
Dehydrator #D003					1.2	
GasComp#1-3 (E002-E004)	0.135	0.135	0.018	65.8	0.9	107.9
PropaneCompressor(E001)	0.002	0.002	0.000	1.0	0.2	0.1
Smart Ash Energy Recovery Unit	0.001	0.001	0.000	0.0	0.0	0.0
Total	<u>0.1377</u>	<u>0.138</u>	<u>0.019</u>	<u>66.8</u>	<u>6.5</u>	<u>108.0</u>

* - Zero value

** - Less than .1 and greater than zero

09/14/2005
02:25PM

Public Service Company of Colorado

Criteria Emissions Summary Report

Roundup Compressor Station

From:	<u>PM</u>	<u>PM10</u>	<u>SO2</u>	<u>NOX</u>	<u>VOC</u>	<u>CO</u>
To:	<u>(tons)</u>	<u>(tons)</u>	<u>(tons)</u>	<u>(tons)</u>	<u>(tons)</u>	<u>(tons)</u>
04/01/2004						
04/01/2005						
Dehydrator #D001-D002					4.6	
Dehydrator #D003					1.3	
GasComp#1-3 (E002-E004)	0.142	0.142	0.019	69.2	0.9	113.3
PropaneCompressor(E001)	0.002	0.002	0.000	1.0	0.2	0.1
Smart Ash Energy Recovery Unit	0.001	0.001	0.001	0.0	0.0	0.0
Total	<u>0.1450</u>	<u>0.145</u>	<u>0.020</u>	<u>70.2</u>	<u>7.0</u>	<u>113.4</u>

* - Zero value

** - Less than .1 and greater than zero

09/14/2005
02:26PM

Public Service Company of Colorado

Criteria Emissions Summary Report

Roundup Compressor Station

From: 03/01/2004	<u>PM</u>	<u>PM10</u>	<u>SO2</u>	<u>NOX</u>	<u>VOC</u>	<u>CO</u>
To: 03/01/2005	<u>(tons)</u>	<u>(tons)</u>	<u>(tons)</u>	<u>(tons)</u>	<u>(tons)</u>	<u>(tons)</u>
Dehydrator #D001-D002					4.7	
Dehydrator #D003					1.2	
GasComp#1-3 (E002-E004)	0.135	0.135	0.018	66.0	0.9	108.2
PropaneCompressor(E001)	0.002	0.002	0.000	1.0	0.2	0.1
Smart Ash Energy Recovery Unit	0.001	0.001	0.001	0.0	0.0	0.0
Total	0.1383	0.138	0.019	67.0	6.9	108.3

* - Zero value

** - Less than .1 and greater than zero

09/14/2005
02:27PM

Public Service Company of Colorado

Criteria Emissions Summary Report

Roundup Compressor Station

From: 02/01/2004
To: 02/01/2005

	<u>PM</u> <u>(tons)</u>	<u>PM10</u> <u>(tons)</u>	<u>SO2</u> <u>(tons)</u>	<u>NOX</u> <u>(tons)</u>	<u>VOC</u> <u>(tons)</u>	<u>CO</u> <u>(tons)</u>
Dehydrator #D001-D002					5.3	
Dehydrator #D003					1.1	
GasComp#1-3 (E002-E004)	0.133	0.133	0.018	65.1	0.8	106.8
PropaneCompressor(E001)	0.002	0.002	0.000	1.0	0.2	0.1
Smart Ash Energy Recovery Unit	0.001	0.001	0.001	0.0	0.0	0.0
Total	<u>0.1366</u>	<u>0.137</u>	<u>0.019</u>	<u>66.1</u>	<u>7.3</u>	<u>106.8</u>

* - Zero value

** - Less than .1 and greater than zero

09/14/2005
02:28PM

Public Service Company of Colorado

Criteria Emissions Summary Report

Roundup Compressor Station

From: 01/01/2004	<u>PM</u>	<u>PM10</u>	<u>SO2</u>	<u>NOX</u>	<u>VOC</u>	<u>CO</u>
To: 01/01/2005	<u>(tons)</u>	<u>(tons)</u>	<u>(tons)</u>	<u>(tons)</u>	<u>(tons)</u>	<u>(tons)</u>
Dehydrator #D001-D002					6.4	
Dehydrator #D003					1.3	
GasComp#1-3 (E002-E004)	0.134	0.134	0.018	65.2	0.9	106.9
PropaneCompressor(E001)	0.002	0.002	0.000	1.1	0.2	0.1
Smart Ash Energy Recovery Unit	0.001	0.001	0.001	0.0	0.0	0.0
Total	<u>0.1371</u>	<u>0.137</u>	<u>0.019</u>	<u>66.3</u>	<u>8.8</u>	<u>107.0</u>

* - Zero value

** - Less than .1 and greater than zero

09/14/2005

02:36PM

Public Service Company of Colorado

Criteria Emissions Summary Report

Roundup Compressor Station

From:	12/01/2003	<u>PM</u>	<u>PM10</u>	<u>SO2</u>	<u>NOX</u>	<u>VOC</u>	<u>CO</u>
To:	12/01/2004	<u>(tons)</u>	<u>(tons)</u>	<u>(tons)</u>	<u>(tons)</u>	<u>(tons)</u>	<u>(tons)</u>
Dehydrator #D001-D002						6.6	
Dehydrator #D003						1.3	
GasComp#1-3 (E002-E004)		0.134	0.134	0.018	65.2	0.9	106.9
PropaneCompressor(E001)		0.002	0.002	0.000	1.1	0.2	0.1
Smart Ash Energy Recovery Unit		0.001	0.001	0.001	0.0	0.0	0.0
Total		<u>0.1369</u>	<u>0.137</u>	<u>0.019</u>	<u>66.3</u>	<u>8.9</u>	<u>107.0</u>

* - Zero value

** - Less than .1 and greater than zero

09/14/2005
02:37PM

Public Service Company of Colorado

Criteria Emissions Summary Report

Roundup Compressor Station

From: 11/01/2003	<u>PM</u>	<u>PM10</u>	<u>SO2</u>	<u>NOX</u>	<u>VOC</u>	<u>CO</u>
To: 11/01/2004	<u>(tons)</u>	<u>(tons)</u>	<u>(tons)</u>	<u>(tons)</u>	<u>(tons)</u>	<u>(tons)</u>
Dehydrator #D001-D002					6.9	
Dehydrator #D003					1.3	
GasComp#1-3 (E002-E004)	0.125	0.125	0.017	61.2	0.8	100.2
PropaneCompressor(E001)	0.002	0.002	0.000	1.1	0.2	0.1
Smart Ash Energy Recovery Unit	0.001	0.001	0.000	0.0	0.0	0.0
Total	<u>0.1285</u>	<u>0.129</u>	<u>0.017</u>	<u>62.3</u>	<u>9.2</u>	<u>100.3</u>

* - Zero value

** - Less than .1 and greater than zero

09/14/2005

02:38PM

Public Service Company of Colorado

Criteria Emissions Summary Report

Roundup Compressor Station

From:	10/01/2003	<u>PM</u>	<u>PM10</u>	<u>SO2</u>	<u>NOX</u>	<u>VOC</u>	<u>CO</u>
To:	10/01/2004	<u>(tons)</u>	<u>(tons)</u>	<u>(tons)</u>	<u>(tons)</u>	<u>(tons)</u>	<u>(tons)</u>
Dehydrator #D001-D002						6.9	
Dehydrator #D003						1.3	
GasComp#1-3 (E002-E004)		0.124	0.124	0.016	60.2	0.8	98.7
PropaneCompressor(E001)		0.002	0.002	0.000	1.1	0.2	0.1
Smart Ash Energy Recovery Unit		0.001	0.001	0.001	0.0	0.0	0.0
Total		<u>0.1274</u>	<u>0.127</u>	<u>0.017</u>	<u>61.3</u>	<u>9.2</u>	<u>98.8</u>

* - Zero value

** - Less than .1 and greater than zero

09/14/2005

02:07PM

Public Service Company of Colorado
Compressor Engine Compliance Report
Roundup Compressor Station
GasComp#1-3 (E002-E004)

Monthly

From: 09/01/2004

To: 09/01/2005

Permit Condition:	≤	125.9 mmscf/yr fuel used
	≤	137.2 tons/yr NOx emissions
Title V Permit Section II.		2.1, 2.2

	Process Information		Compliance Status		Annual Hours
	Fuel Used (mmscf)	NOx Emissions* (tons)	Fuel Used (mmscf)	NOx Emissions* (tons)	
Sep 2004	9.1	10.0	N/A	N/A	1,321
Oct 2004	10.7	11.8	N/A	N/A	1,549
Nov 2004	3.8	4.1	N/A	N/A	541
Dec 2004	0.0	0.0	N/A	N/A	0
Jan 2005	0.0	0.0	N/A	N/A	6
Feb 2005	4.3	4.7	N/A	N/A	611
Mar 2005	10.1	11.0	N/A	N/A	1,478
Apr 2005	2.1	2.3	N/A	N/A	303
May 2005	0.6	0.7	N/A	N/A	89
Jun 2005	0.0	0.0	N/A	N/A	0
Jul 2005	0.0	0.0	N/A	N/A	0
Aug 2005	5.9	6.5	N/A	N/A	918
12-Month Total	46.5	51.1	Yes	Yes	6,816.00

* Compliance with NOx emissions also demonstrates compliance with CO and VOC emission limits

09/14/2005

02:06PM

Public Service Company of Colorado
Compressor Engine Compliance Report
Roundup Compressor Station
Propane Compressor(E001)

From: 09/01/2004

To: 09/01/2005

Permit Condition: ≤ 17.34 mmscf/yr fuel used
≤ 26.4 tons/yr NOx emissions
Title V Permit Section II.

	Process Information		Compliance Status		<u>hrs</u>
	Fuel Used (mmscf)	NOx Emissions* (tons)	Fuel Used (mmscf)	NOx Emissions* (tons)	
Sep 2004	0.00	0.0	N/A	N/A	
Oct 2004	0.00	0.0	N/A	N/A	
Nov 2004	0.00	0.0	N/A	N/A	
Dec 2004	0.00	0.0	N/A	N/A	
Jan 2005	0.11	0.1	N/A	N/A	
Feb 2005	0.21	0.2	N/A	N/A	
Mar 2005	0.26	0.3	N/A	N/A	
Apr 2005	0.08	0.1	N/A	N/A	
May 2005	0.01	0.0	N/A	N/A	
Jun 2005	0.00	0.0	N/A	N/A	
Jul 2005	0.00	0.0	N/A	N/A	
Aug 2005	0.00	0.0	N/A	N/A	
12-Month Total	0.68	0.8	Yes	Yes	

* Compliance with NOx emissions also demonstrates compliance with CO and VOC emission limits

09/14/2005

09:50AM

Public Service Company of Colorado
Smart Ash Energy Recovery Unit Compliance Report
Roundup Compressor Station
Smart Ash Energy Recovery Unit

Permit Conditions:	≤	0.03 tons/year PM emissions
	≤	10 tons/year waste burned

From: 09/01/2004

To: 09/01/2005

	Process Information			Compliance Status	
	PM Emissions (tons/year)	Waste Burned (tons/year)	Hours of Operation	PM Emissions* (tons/year)	Waste Burned (tons/year)
Sep 2004	0.0001	0.02	5.00	N/A	N/A
Oct 2004	0.0001	0.04	7.00	N/A	N/A
Nov 2004	0.0001	0.05	10.00	N/A	N/A
Dec 2004	0.0001	0.05	10.00	N/A	N/A
Jan 2005	0.0000	0.00	0.00	N/A	N/A
Feb 2005	0.0000	0.00	0.00	N/A	N/A
Mar 2005	0.0001	0.04	7.00	N/A	N/A
Apr 2005	0.0000	0.00	0.00	N/A	N/A
May 2005	0.0002	0.09	17.00	N/A	N/A
Jun 2005	0.0000	0.01	2.00	N/A	N/A
Jul 2005	0.0000	0.00	0.00	N/A	N/A
Aug 2005	0.0000	0.00	0.00	N/A	N/A
12-Month Total	0.001	0.29	58.00	Yes	Yes

* Compliance with PM emissions also demonstrates compliance with all other permitted emission limits

09/14/2005

09:51AM

Public Service Company of Colorado

Glycol Dehydrator Compliance Report

Roundup Compressor Station

Dehydrator #D001-D002

From: 09/01/2004

To: 09/01/2005

Permit Condition: \leq 18,250 mmscf/yr gas processed

\leq 28 tons/yr VOC emissions

Title V Permit Section II.

	Process Information		Compliance Status		Operating Days
	Natural Gas Processed (mmscf)	VOC Emissions (tons)	Natural Gas Processed (mmscf)	VOC Emissions (tons)	
Sep 2004	0	0.0	N/A	N/A	
Oct 2004	0	0.0	N/A	N/A	
Nov 2004	0	0.0	N/A	N/A	
Dec 2004	386	0.6	N/A	N/A	
Jan 2005	458	0.4	N/A	N/A	
Feb 2005	475	0.8	N/A	N/A	
Mar 2005	553	0.8	N/A	N/A	
Apr 2005	96	0.3	N/A	N/A	
May 2005	36	0.1	N/A	N/A	
Jun 2005	0	0.0	N/A	N/A	
Jul 2005	0	0.0	N/A	N/A	
Aug 2005	0	0.0	N/A	N/A	
12-Month Total	2,004	2.9	Yes	Yes	242.66

09/14/2005

09:51AM

Public Service Company of Colorado
Glycol Dehydrator Compliance Report
Roundup Compressor Station
Dehydrator #D003

From: 09/01/2004

To: 09/01/2005

Permit Condition: \leq 18,250 mmscf/yr gas processed

\leq 16 tons/yr VOC emissions

Title V Permit Section II.

	Process Information		Compliance Status		Operating Days
	Natural Gas Processed (mmscf)	VOC Emissions (tons)	Natural Gas Processed (mmscf)	VOC Emissions (tons)	
Sep 2004	0	0.0	N/A	N/A	
Oct 2004	0	0.0	N/A	N/A	
Nov 2004	0	0.0	N/A	N/A	
Dec 2004	0	0.0	N/A	N/A	
Jan 2005	260	0.1	N/A	N/A	
Feb 2005	475	0.3	N/A	N/A	
Mar 2005	553	0.4	N/A	N/A	
Apr 2005	96	0.1	N/A	N/A	
May 2005	36	0.0	N/A	N/A	
Jun 2005	0	0.0	N/A	N/A	
Jul 2005	0	0.0	N/A	N/A	
Aug 2005	0	0.0	N/A	N/A	
12-Month Total	1,421	0.9	Yes	Yes	82.33

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EMPACT ANALYTICAL SYSTEMS, INC

365 SOUTH MAIN STREET

BRIGHTON, CO 80601

(303) 637-0150

EXTENDED NATURAL GAS ANALYSIS (*DHA)

PROJECT NO. : 0502044 ANALYSIS NO. : 02
COMPANY NAME : XCEL ENERGY ANALYSIS DATE: FEBRUARY 12, 2005
ACCOUNT NO. : SAMPLE DATE : FEBRUARY 11, 2005
PRODUCER : TO:
LEASE NO. : CYLINDER NO. : 4
NAME/DESCRIP : ROUNDUP
FIELD DATA INLET TO NGL PLANT
SAMPLED BY: RON WYATT AMBIENT TEMP.:
SAMPLE PRES. : 681 SAMPLE TEMP. : 74.3 GRAVITY :
COMMENTS : NO PROBE

COMPONENT	MOLE %	MASS %	GPM@ 14.696	GPM@ 14.73
HELIUM	0.009	0.002	---	---
HYDROGEN	0.000	0.000	---	---
OXYGEN/ARGON	0.000	0.000	---	---
NITROGEN	0.440	0.658	---	---
CO2	2.885	6.775	---	---
METHANE	85.249	72.972	---	---
ETHANE	10.084	16.180	2.6908	2.6970
PROPANE	1.114	2.621	0.3062	0.3069
I-BUTANE	0.054	0.167	0.0176	0.0176
N-BUTANE	0.073	0.228	0.0230	0.0231
I-PENTANE	0.016	0.063	0.0058	0.0058
N-PENTANE	0.014	0.054	0.0051	0.0051
HEXANES PLUS	0.062	0.280	0.0182	0.0182
TOTALS	100.000	100.000	3.0667	3.0737

BTEX COMPONENTS	MOLE%	WT%	BTU @	14.696	14.73
BENZENE	0.001	0.002 LOW	NET DRY REAL :	973.49 /scf	975.74 /scf
ETHYLBENZENE	0.000	0.001	NET WET REAL :	956.52 /scf	958.78 /scf
TOLUENE	0.001	0.003 HIGH	GROSS DRY REAL :	1077.53 /scf	1080.02 /scf
XYLENES	0.000	0.004	GROSS WET REAL :	1058.75 /scf	1061.24 /scf
TOTAL BTEX	0.002	0.010	NET DRY REAL :	19673 /lb	19719 /lb
			GROSS DRY REAL :	21776 /lb	21826 /lb
			RELATIVE DENSITY (AIR=1):		0.648
			COMPRESSIBILITY FACTOR :		0.99746

(CALC: GPA STD 2145 & TP-17 @14.696 & 60 F)

*DHA (DETAILED HYDROCARBON ANALYSIS/NJ 1993)

: ASTM D6730

THIS DATA HAS BEEN ACQUIRED THROUGH APPLICATION OF CURRENT STATE-OF-THE-ART ANALYTICAL TECHNIQUES.
THE USE OF THIS INFORMATION IS THE RESPONSIBILITY OF THE USER. EMPACT ANALYTICAL SYSTEMS, ASSUMES NO
RESPONSIBILITY FOR ACCURACY OF THE REPORTED INFORMATION NOR ANY CONSEQUENCES OF ITS APPLICATION.

EMPACT ANALYTICAL SYSTEMS, INC

365 SOUTH MAIN STREET

BRIGHTON, CO 80601

(303) 637-0150

E & P /GlyCalc Information

PROJECT NO. :	0502044	ANALYSIS NO. :	02
COMPANY NAME :	XCEL ENERGY	ANALYSIS DATE:	FEBRUARY 12, 2005
ACCOUNT NO. :		SAMPLE DATE :	FEBRUARY 11, 2005
PRODUCER :		TO:	
LEASE NO. :		CYLINDER NO. :	4
NAME/DESCRIP :	ROUNDUP		
FIELD DATA	INLET TO NGL PLANT		
SAMPLED BY:	RON WYATT	AMBIENT TEMP.:	
SAMPLE PRES. :	681	GRAVITY :	
		SAMPLE TEMP. :	74.3
COMMENTS :	NO PROBE		

Component	Mole %	Wt %
Helium	0.009	0.002
Hydrogen	0.000	0.000
Methanol	0.028	0.047
Carbon Dioxide	2.885	6.775
Nitrogen	0.440	0.658
Methane	85.249	72.972
Ethane	10.084	16.180
Propane	1.114	2.621
Isobutane	0.054	0.167
n-Butane	0.073	0.228
Isopentane	0.016	0.063
n-Pentane	0.014	0.054
Cyclopentane	0.001	0.004
n-Hexane	0.004	0.017
Cyclohexane	0.002	0.009
Other Hexanes	0.008	0.036
Heptanes	0.006	0.037
Methycyclohexane	0.003	0.017
2,2,4 Trimethylpentane	0.000	0.000
Benzene	0.001	0.002
Toluene	0.001	0.003
Ethylbenzene	0.000	0.001
Xylenes	0.000	0.004
C8+ Heavies	0.008	0.103
Subtotal	100.000	100.000
Oxygen	0.000	0.000
Total	100.000	100.000

EMPACT ANALYTICAL SYSTEMS, INC

365 SOUTH MAIN STREET

BRIGHTON, CO 80601

(303) 637-0150

EXTENDED NATURAL GAS ANALYSIS (*DHA)

PROJECT NO. : 0502044
COMPANY NAME : XCEL ENERGY

ANALYSIS NO. : 02
ANALYSIS DATE: FEBRUARY 12, 2005

COMPONENT	PIANO #	MOLE %	MASS %	GPM 14.696	GPM 14.73
HELIUM		0.009	0.002	---	---
HYDROGEN		0.000	0.000	---	---
OXYGEN/ARGON		0.000	0.000	---	---
NITROGEN		0.440	0.658	---	---
CO2		2.885	6.775	---	---
METHANE	P1	85.249	72.972	---	---
ETHANE	P2	10.084	16.180	2.6908	2.6970
PROPANE	P3	1.114	2.621	0.3062	0.3069
I-BUTANE	I4	0.054	0.167	0.0176	0.0176
N-BUTANE	P4	0.073	0.228	0.0230	0.0231
2,2 DIMETHYLPROPANE	I5	0.000	0.001	0.0000	0.0000
I-PENTANE	I5	0.016	0.062	0.0058	0.0058
N-PENTANE	P5	0.014	0.054	0.0051	0.0051
2,2 DIMETHYLBUTANE	I6	0.000	0.001	0.0000	0.0000
METHANOL	X1	0.028	0.047	0.0036	0.0036
CYCLOPENTANE	N5	0.001	0.004	0.0003	0.0003
2,3 DIMETHYLBUTANE	I6	0.000	0.002	0.0000	0.0000
2 METHYLPENTANE	I6	0.003	0.013	0.0012	0.0012
3 METHYLPENTANE	I6	0.002	0.008	0.0008	0.0008
N-HEXANE	P6	0.004	0.017	0.0016	0.0016
2,2-DIMETHYLPENTANE	I7	0.000	0.001	0.0000	0.0000
METHYLCYCLOPENTANE	N6	0.003	0.012	0.0011	0.0011
2,4 DIMETHYLPENTANE	I7	0.000	0.001	0.0000	0.0000
2,2,3 TRIMETHYLBUTANE	I7	0.000	0.001	0.0000	0.0000
BENZENE	A6	0.001	0.002	0.0003	0.0003
CYCLOHEXANE	O6	0.002	0.009	0.0007	0.0007
2 METHYLHEXANE	I7	0.001	0.004	0.0005	0.0005
2,3 DIMETHYLPENTANE	I7	0.000	0.002	0.0000	0.0000
1,1 DIMETHYLCYCLOPENTANE	N7	0.000	0.001	0.0000	0.0000
3 METHYLHEXANE	I7	0.001	0.005	0.0005	0.0005
1,C 3 DIMETHYLCYCLOPENTANE	N7	0.001	0.003	0.0004	0.0004
1,T 3 DIMETHYLCYCLOPENTANE	N7	0.000	0.002	0.0000	0.0000
3 ETHYLPENTANE	I7	0.000	0.001	0.0000	0.0000
1,T 2 DIMETHYLCYCLOPENTANE	N7	0.001	0.004	0.0004	0.0004
N-HEPTANE	P7	0.002	0.010	0.0009	0.0009
1,C 2 DIMETHYLCYCLOPENTANE	N7	0.000	0.001	0.0000	0.0000
METHYLCYCLOHEXANE	N7	0.003	0.017	0.0012	0.0012
2,2-DIMETHYLHEXANE	I8	0.000	0.001	0.0000	0.0000
ETHYLCYCLOPENTANE	N7	0.000	0.001	0.0000	0.0000

PROJECT NO. : 0502044
COMPANY NAME : XCEL ENERGY

ANALYSIS NO. : 02
ANALYSIS DATE: FEBRUARY 12, 2005

COMPONENT	PIANO #	MOLE %	MASS %	GPM 14.696	GPM 14.73
2,5-DIMETHYLHEXANE	I8	0.000	0.001	0.0000	0.0000
2,4-DIMETHYLHEXANE	I8	0.000	0.001	0.0000	0.0000
1C,2T,4-TRIMETHYLCYCLOPENTANE	N8	0.000	0.001	0.0000	0.0000
TOLUENE	A7	0.001	0.003	0.0003	0.0003
2,3-DIMETHYLHEXANE	I8	0.000	0.001	0.0000	0.0000
2-METHYLHEPTANE	I8	0.001	0.004	0.0005	0.0005
4-METHYLHEPTANE	I8	0.000	0.001	0.0000	0.0000
3-METHYLHEPTANE	I8	0.000	0.001	0.0000	0.0000
1C,2T,3-TRIMETHYLCYCLOPENTANE	N8	0.001	0.005	0.0005	0.0005
3-ETHYLHEXANE	I8	0.000	0.001	0.0000	0.0000
1T,4-DIMETHYLCYCLOHEXANE	N8	0.000	0.002	0.0000	0.0000
1,1-DIMETHYLCYCLOHEXANE	N8	0.000	0.001	0.0000	0.0000
3C-ETHYLMETHYLCYCLOPENTANE	N8	0.000	0.001	0.0000	0.0000
3T-ETHYLMETHYLCYCLOPENTANE	N8	0.000	0.001	0.0000	0.0000
2T-ETHYLMETHYLCYCLOPENTANE	N8	0.000	0.001	0.0000	0.0000
2,2,4-TRIMETHYLHEXANE	I9	0.000	0.002	0.0000	0.0000
N-OCTANE	P8	0.001	0.008	0.0005	0.0005
1,1,4-TRIMETHYLCYCLOHEXANE	N9	0.000	0.003	0.0000	0.0000
2,4-DIMETHYLHEPTANE	I9	0.000	0.001	0.0000	0.0000
2,2-DIMETHYLHEPTANE	I9	0.000	0.001	0.0000	0.0000
4,4-DIMETHYLHEPTANE	I9	0.000	0.001	0.0000	0.0000
1C,3C,5-TRIMETHYLCYCLOHEXANE	N9	0.000	0.001	0.0000	0.0000
ETHYLBENZENE	A8	0.000	0.001	0.0000	0.0000
1C,2T,4T-TRIMETHYLCYCLOHEXANE	N9	0.000	0.001	0.0000	0.0000
1,3-DIMETHYLBENZENE (M-XYLENE)	A8	0.000	0.002	0.0000	0.0000
1,4-DIMETHYLBENZENE (P-XYLENE)	A8	0.000	0.001	0.0000	0.0000
2,3-DIMETHYLHEPTANE	I9	0.000	0.001	0.0000	0.0000
3,4-DIMETHYLHEPTANE	I9	0.000	0.001	0.0000	0.0000
4-ETHYLHEPTANE	I9	0.000	0.001	0.0000	0.0000
4-METHYLOCTANE	I9	0.000	0.001	0.0000	0.0000
1,1,2-TRIMETHYLCYCLOHEXANE	N9	0.000	0.001	0.0000	0.0000
I-BUTYLCYCLOPENTANE	N9	0.000	0.001	0.0000	0.0000
1,2-DIMETHYLBENZENE (O-XYLENE)	A8	0.000	0.001	0.0000	0.0000
UNKNOWN OCTANES	U8	0.000	0.002	0.0000	0.0000
N-NONANE	P9	0.001	0.007	0.0006	0.0006
I-PROPYLBENZENE	A9	0.000	0.001	0.0000	0.0000
I-PROPYLCYCLOHEXANE	N9	0.000	0.001	0.0000	0.0000
2,3-DIMETHYLOCTANE	I10	0.000	0.001	0.0000	0.0000
2,6-DIMETHYLOCTANE	I10	0.000	0.002	0.0000	0.0000
1,3-METHYLETHYLBENZENE	A9	0.000	0.001	0.0000	0.0000
1,4-METHYLETHYLBENZENE	A9	0.000	0.001	0.0000	0.0000
5-METHYLNONANE	I10	0.000	0.001	0.0000	0.0000
1,2-METHYLETHYLBENZENE	A9	0.000	0.001	0.0000	0.0000
3-ETHYLOCTANE	I10	0.000	0.001	0.0000	0.0000
3-METHYLNONANE	I10	0.000	0.001	0.0000	0.0000
I-BUTYLCYCLOHEXANE	N10	0.000	0.001	0.0000	0.0000
T-BUTYLBENZENE	A10	0.000	0.001	0.0000	0.0000

PROJECT NO. : 0502044
COMPANY NAME : XCEL ENERGY

ANALYSIS NO. : 02
ANALYSIS DATE: FEBRUARY 12, 2005

COMPONENT	PIANO #	MOLE %	MASS %	GPM 14.696	GPM 14.73
UNKNOWN NONANES	U9	0.001	0.007	0.0006	0.0006
N-DECANE	P10	0.001	0.006	0.0006	0.0006
1,2-METHYL-I-PROPYLBENZENE	A10	0.000	0.001	0.0000	0.0000
N-BUTYLBENZENE	A10	0.000	0.001	0.0000	0.0000
1,3-DIMETHYL-4-ETHYLBENZENE	A10	0.000	0.001	0.0000	0.0000
1,2-DIMETHYL-4-ETHYLBENZENE	A10	0.000	0.001	0.0000	0.0000
UNKNOWN DECANES	U10	0.001	0.006	0.0006	0.0006
N-UNDECANE	P11	0.001	0.005	0.0005	0.0005
UNKNOWN UNDECANES	U11	0.000	0.002	0.0000	0.0000
DODECANES	P12	0.000	0.002	0.0000	0.0000
TRIDECANES	P13	0.000	0.001	0.0000	0.0000
TETRADECANES PLUS	P14	0.000	0.001	0.0000	0.0000
TOTALS		100.000	100.000	3.0667	3.0737

IMPACT ANALYTICAL SYSTEMS, INC

365 SOUTH MAIN STREET

BRIGHTON, CO 80601

(303) 637-0150

PROJECT NO: 0502044

COMPANY NAME: XCEL ENERGY

NAME/DESCRIP: ROUNDUP

INLET TO NGL PLANT

SAMPLE NO: 02

ANALYSIS DATE: FEBRUARY 13, 2005

SAMPLE DATE: FEBRUARY 11, 2005

TEST PROCEDURE / METHOD:

PPM BTEX IN NATURAL GAS BY GC/FID

<u>COMPONENT</u>	<u>CONCENTRATION</u>
	<u>ppm (mole)*</u>
benzene	3
toluene	5
ethylbenzene	1
m-xylene	3
p-xylene	1
o-xylene	1
TOTAL BTEX	<u>14</u>

*DETECTION LIMIT DETERMINED TO BE 1 PPM (MOLE)

BDL = BELOW DETECTION LIMIT

THE DATA PRESENTED HEREIN HAS BEEN ACQUIRED THROUGH JUDICIOUS APPLICATION OF CURRENT STATE-OF-THE ART ANALYTICAL TECHNIQUES. THE APPLICATIONS OF THIS INFORMATION IS THE RESPONSIBILITY OF THE USER. EMPACT ANALYTICAL SYSTEMS, INC. ASSUMES NO RESPONSIBILITY FOR ACCURACY OF THE REPORTED INFORMATION NOR ANY CONSEQUENCES OF IT'S APPLICATION.

Vapor Relief Valve Test Form

Public Service Co.

Roundup Gas Processing Plant

Year 2005

Equipment Calibrated? Yes / No

Unit Description	Equip #	Unit #	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
------------------	---------	--------	---------	---------	---------	---------

Date of Test > 1-14-05 5-19-05 6-28-05

Vapor Relief Valves

			OK/LK/SD	OK/LK/SD	OK/LK/SD	OK/LK/SD
Stabilizer	PSV 501	483 - 202	OK	OK	OK	
Hydrocarbon Sep	PSV 416	483-201	OK	OK	OK	
E-201	PSV-201	483-201	OK	OK	OK	
Refr Discharge Filtr/Sep	PSV 404	483 - 202	OK	OK	OK	
Product Cooler	PSV 302	483 - 202	OK	OK	OK	
Refrigerant Accumulator	PSV 405	483 - 202	OK	OK	OK	
Refrigerant Economizer	PSV 406	483 - 202	OK	OK	OK	
Refrig Suction Separator	PSV 407	483 - 202	OK	OK	OK	
Refrigerant Storage Tank, (North Relief Valve)	-	-	OK	OK	OK	
Refrigerant Storage Tank, (South Relief Valve)	-	-	OK	OK	OK	
NGL Storage Tank, (East End)	-	-	OK	OK	OK	
Tester Initials			MB	MB	MB	

* Leaks greater than 10,000ppm (over 1% in air) are considered a leak.
Test again within 5 days of any release - Fill out Leak Log

Comments:

Pump, Liquid Relief Valve, & Compressor Test

Public Service Co.

Month June Yr 05

Roundup Gas Processing Plant

Date of Test Equipment Calibration:

April 4

Quarter.

Unit Description	Eqpt #	Unit No	Wk1	Wk 2	Wk 3	Wk 4	Month
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Equipment

Test Date>
Test By>

Visual	Visual	Visual	Visual	Test
6-2-05	6-9-05	6-13-05	6-27-05	6-28-05
RL	ELL	ELL	MB	MB
OK/LK/SD	OK/LK/SD	OK/LK/SD	OK/LK/SD	OK/LK/SD
OK	OK	OK	OK	OK
OK	OK	OK	OK	OK

NGL Loading Pump

Refrigerant Compressor C 101

*Leaks great than 10,000ppm (over 1% in air), or visual leakage are considered a leak. - Complete Leak Log
Test within 5 days of any release - Complete Leak Log

Comments:

VOC VALVE TEST FORM

Unit Description	Unit #	Size	Valve#	Description	OK/Leak
Gas/Feed Exchanger	E202	1		V41-230 fr Gas/Feed (horizontal)	OK
		1		V2-229 GlySep to Stab (vertical)	OK
Chiller	E203	1		Gas outlet header drain	OK
Hydrocarbon Separator	V 416	C		LC-416 Hydrocarbon Dump Contr.	OK
		C		LC-416A Glycol Dump Contr.	OK
		1	Lower Control	LCV-416 Hydrocarbon Dump	OK
		1		LCV-416A Glycol Dump	OK
		1/4		LG-416 Single Glass, Lower	OK
		1/4		LG-416A Single Glass, Lower	OK
		1/4	Pressure Control	PCV-416	OK
		1/4		PCV-416A	OK
		1/4		PI-416	OK
		1.5		PSV-416	OK
		3/4	TI-416	TI-416	OK
		1		V41-262 LCV-416 Upstream	OK
		1		V41-263 LCV-416A Bypass	OK
		1		V41-264 LCV-416A Downstream	OK
		2		V42-265 V-416 Cleanout	OK
		2		V42-266 V-416 Cleanout	OK
		1		V41-267 LCV-416 Upstream	OK
		1		V41-268 LCV-416 Bypass	OK
		1		V41-269 LCV-416 Downstream	OK
		1		V41-270 T-501 Feed Block	OK
		1		V33-271 T-501 Feed Check Valve	OK
		1/4		V7-272 PCV-416 Upstream	OK
		1/4		V7-273 PCV-416 Bypass	OK
		1/4		V7-274 PCV-416 Downstream	OK
		2		V13-275 PSV-416 Block	OK
		1		V41-276 V-416 Feed from V-406	OK
		1		V41-277 V-416 Bypass	OK
		1		V41-278 PSV-206 Block	OK
		1		V41-279 V-416 to V-413 Block	OK
		1/4		V42-280 PCV-416A Inlet	OK
		1/4		V342-281 PCV-416A Drip Leg	OK
		1/4		V42-282 PCV-416A Drip Leg Vent	OK
Glycol (3 phase) Separator	V 402	C		LG 402 A; single glass, lower	OK
		C		LG 402 (double glass)	OK
		1		V41-256 outlet valve glycol boot	OK
		1		V11-257 site glass tap	OK
		0.75		V11-258 drain	OK
		1		V11-259 displacer, lower	OK
		1		V11-260 site glass, lower	OK
		2		V41-261 displacer, lower	OK
		1	Pressure	PI 402 (top of LG 402 assy)	OK
		C		Bottoms drain on product outlet	OK
Stabilizer	T 501	2		Bottom dump valve V41-242	OK
		1		LC 501 liq level controller assy	OK
		1		Side blowdown valve V41-238	OK
		C		LG 501 assembly + PI 501	OK
		1		LCV 501 (to cooler) in, V41-243	OK
		1		LCV 501 level ctrl - prod to cooler	OK
		1		LCV 501 (to cooler) out, V41-244	OK
		1		LCV 501 (to cooler) byp, V2-245	OK
		1		LCV 501 (to cooler) drains	OK
		1	Pressure	PSV 501 (btm) block vlv V42-241	OK
		B	Safety Valve	PSV 501 (Stab bottom) test vlvs	OK

VOC VALVE TEST FORM

Unit Description	Unit #	Size	Valve#	Description	OK/Leak
		1		LCV 402 (3phs:lvl) in, V41-231	OK
		1		LCV 402 3 phase liquid lvl control	OK
		1		LCV 402 (3phs lvl) out, V41-232	OK
		1		LCV 402 (3phs lvl) byp, V2-233	OK
		1		LCV 402 (3phs lvl) drains	OK
		1		Blowdown, header above LCV init	OK
Product Cooler	A 302	C		PSV block vlv V42-246 above chir	OK
		B		PSV 302 test valves	OK
		1		Inlet header blowdown	OK
NGL Storage Tank		1		Liquids inlet from plant, east end and product sample valve	OK
		2		Bottom inlet, east end	OK
		C		LG assembly, east end	OK
		1		LG block valve, top of tank	OK
		2		PSV block valve, top	OK
		4		Outlet to pump, west end bottom	OK
		2		Vapor return, west end bottom	OK
		1		Vapor return to vent, west end	OK
NGL Loading Pump		4		Pump inlet	OK
		3		Pump bypass	OK
		3		Pump outlet	OK
NGL Loading Rack		3		Liquid to hoses	OK
		2		Liquid hose end valve	OK
		2		Vapor hose end valve	OK
		1		Vapor reutnr form hose	OK
		B		Hose vent holding tank assy	OK
Refrigerant Compressor	C 101	6		Suction header PI	OK
		6		Suction block valve V12-401	OK
		2		Bypass around suction PCV 101	OK
		A		PCV 101 outlet PI and sensing line	OK
		3		Bypass to dischare V11-402	OK
		B		Interstage header PI	OK
		3		Interstage block valve V11-405	OK
		1.5		Bypass around interstage block v	OK
		3		Discharge block valve V11-403	OK
		3		Discharge check valve V11-404	OK
		1		Discharge vent valve	OK
		B		Discharge header PI	OK
		B		Refr header blowdowns (by pit)	OK
Refr Discharge Filtr/Sep	F 404	3		Inlet block valve V11-212	OK
		C		PSV 404 inlet block	OK
		C		PSV 404 inlet bypass	OK
		1		PSV 404 outlet block	OK
		C		LG 404 assembly	OK
		3		Outlet block valve V11-214	OK
		1		Outlet header drain valve V41	OK
		B		Cessel blowdown, south side	OK
		3		Vessel bypass valve V11-213	OK
		A		PDI 404 assembly	OK
		1		Bottoms dump valve V41-215	OK
Refrigerant Condenser	A 301	3		Inlet block valve V62-211	OK
		1		Inlet header blowdown	OK
Refrigerant Accumulator	V 406	2		PCV 405 Big Joe inlet V41-223	OK
		2		PCV 405 (Big Joe) cooler bypass	OK
		2		PCV 405 Big Joe outlet V41-224	OK
		2.5		PSV 405 block valve V13-201	OK

VOC VALVE TEST FORM

Unit Description	Unit #	Size	Valve#	Description	OK/Leak
		B		PSV 405 test valves	ok
		C		LG 405 assembly + PI 405	ok
		C		Vessel blowdown	ok
		1		Bottoms dump valve	ok
Refrigerant Economizer		2		LCV 406 (Econ lvi) in V41-205	ok
		1.5		LCV 406 Econ liq lvi controller	ok
		3		LCV 406 (Econ lvi) out V41-206	ok
		2		LCV 406 (Econ lvi) bypass V2-207	ok
		C		LCV 406 (Econ lvi) inlet hdr drains	ok
		C		LCV 406 (Econ lvi) out hdr drains	ok
		B		PI 406	ok
		1		PSV 406 block valve V13-204	ok
		B		PSV 406 test valves	ok
Refrig Suction Separator	V 407	2		PSV 407 block valve V13-206	ok
		B		PSV 407 test valves	ok
		B		PI 407	ok
		1		Refrigerant makeup valve (top)	ok
Chiller	E 203	2		PCV 203 (chill hot by) in V41-223	ok
		1.5		PCV 203 chiller hot bypass ctl vlv	ok
		2		PCV 203 (chill hot by) out V41-224	ok
		1		PCV 203 (chill hot by) byp V2-225	ok
		C		PCV 203 (chill hot by) drains	ok
		B		PI 203 / PC 203 assembly	ok
		2		Refrigerant makeup vlv V41-216	ok
		3		LCV 203 (chlr lvi) in V41-217	ok
		3		LCV 203 chiller level control vlv	ok
		1.5		LCV 203 (chlr lvi) out V41-218	ok
		2		LCV 203 (chlr lvi) bypass V2-219	ok
		C		LCV 203 (chlr lvi) drain	ok
		1		Bottoms header drain valve	ok
Refrigerant Reclaimer	V 408	1		Inlet block valve V41-220	ok
		1		Dump valve V41-222	ok
		1		Outlet block to chlr V41-221	ok
Refrigerant Storage Tank		2		Bottoms dump valve	ok
		C		Vapor connection, north end	ok

1. Leaks greater than 10,000 ppm (over 1% in air) are considered a leak.
2. If leak is found, fill out "LEAK LOG", and hang tag.
3. Use Test Method 21, as described in VOC Compliance Manual
4. For this test, use: HeathTech Detecto Pak III
5. To verify leaks, use: CGI



4653 Table Mountain Drive
Golden, Colorado 80403

RECEIVED
SEP 21 2005
ECEJ-TEP

September 19, 2005

Mr. Emilio Llamozas
US EPA
Technical Enforcement Program
999 18th Street, Suite 300
Denver, CO 80202

Re: Additional Information for Roundup Station

Dear Mr. Llamozas:

Enclosed are the dehydrator operating data for the last 12 months, the average annual gas analyses, which includes the Northern Zone, and a table with the hours and fuel use for all the engines at the site. If you need any further information, please contact me.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Robert E. King', written over a horizontal line.

Robert E. King
Environmental Coordinator

Cc: Eldon Lindt
ES file

ROUNDUP STATION ENGINE HOURS AND FUEL USE							12 MONTH ROLLING AVE.	
Begin Date	End Date	Name	Name	Hours of Operation	Fuel Used - Gas			
					MMSCF	MMSCF		
10/1/2003 12:00:00 AM	11/1/2003 12:00:00 AM	Roundup Compressor Station	PropaneCompressor(E001)	0.00	0.00			
11/1/2003 12:00:00 AM	12/1/2003 12:00:00 AM	Roundup Compressor Station	PropaneCompressor(E001)	0.00	0.00			
12/1/2003 12:00:00 AM	1/1/2004 12:00:00 AM	Roundup Compressor Station	PropaneCompressor(E001)	0.00	0.00			
1/1/2004 12:00:00 AM	2/1/2004 12:00:00 AM	Roundup Compressor Station	PropaneCompressor(E001)	598.00	0.23			
2/1/2004 12:00:00 AM	3/1/2004 12:00:00 AM	Roundup Compressor Station	PropaneCompressor(E001)	696.00	0.25			
3/1/2004 12:00:00 AM	4/1/2004 12:00:00 AM	Roundup Compressor Station	PropaneCompressor(E001)	513.00	0.18			
4/1/2004 12:00:00 AM	5/1/2004 12:00:00 AM	Roundup Compressor Station	PropaneCompressor(E001)	281.00	0.12			
5/1/2004 12:00:00 AM	6/1/2004 12:00:00 AM	Roundup Compressor Station	PropaneCompressor(E001)	657.00	0.23			
6/1/2004 12:00:00 AM	7/1/2004 12:00:00 AM	Roundup Compressor Station	PropaneCompressor(E001)	0.00	0.00			
7/1/2004 12:00:00 AM	8/1/2004 12:00:00 AM	Roundup Compressor Station	PropaneCompressor(E001)	0.00	0.00			
8/1/2004 12:00:00 AM	9/1/2004 12:00:00 AM	Roundup Compressor Station	PropaneCompressor(E001)	0.00	0.00			
9/1/2004 12:00:00 AM	10/1/2004 12:00:00 AM	Roundup Compressor Station	PropaneCompressor(E001)	0.00	0.00		1.02	
10/1/2004 12:00:00 AM	11/1/2004 12:00:00 AM	Roundup Compressor Station	PropaneCompressor(E001)	0.00	0.00		1.02	
11/1/2004 12:00:00 AM	12/1/2004 12:00:00 AM	Roundup Compressor Station	PropaneCompressor(E001)	0.00	0.00		1.02	
12/1/2004 12:00:00 AM	1/1/2005 12:00:00 AM	Roundup Compressor Station	PropaneCompressor(E001)	0.00	0.00		1.02	
1/1/2005 12:00:00 AM	2/1/2005 12:00:00 AM	Roundup Compressor Station	PropaneCompressor(E001)	287.00	0.11		0.89	
2/1/2005 12:00:00 AM	3/1/2005 12:00:00 AM	Roundup Compressor Station	PropaneCompressor(E001)	619.00	0.21		0.86	
3/1/2005 12:00:00 AM	4/1/2005 12:00:00 AM	Roundup Compressor Station	PropaneCompressor(E001)	724.00	0.26		0.94	
4/1/2005 12:00:00 AM	5/1/2005 12:00:00 AM	Roundup Compressor Station	PropaneCompressor(E001)	228.00	0.08		0.90	
5/1/2005 12:00:00 AM	6/1/2005 12:00:00 AM	Roundup Compressor Station	PropaneCompressor(E001)	57.00	0.01		0.69	
6/1/2005 12:00:00 AM	7/1/2005 12:00:00 AM	Roundup Compressor Station	PropaneCompressor(E001)	0.00	0.00		0.63	
7/1/2005 12:00:00 AM	8/1/2005 12:00:00 AM	Roundup Compressor Station	PropaneCompressor(E001)	0.00	0.00		0.68	
8/1/2005 12:00:00 AM	9/1/2005 12:00:00 AM	Roundup Compressor Station	PropaneCompressor(E001)	0.00	0.00		0.68	
10/1/2003 12:00:00 AM	11/1/2003 12:00:00 AM	Roundup Compressor Station	Gas Comp #3 (E002)	610.00	4.27			
11/1/2003 12:00:00 AM	12/1/2003 12:00:00 AM	Roundup Compressor Station	Gas Comp #3 (E002)	0.00	0.00			
12/1/2003 12:00:00 AM	1/1/2004 12:00:00 AM	Roundup Compressor Station	Gas Comp #3 (E002)	0.00	0.00			
1/1/2004 12:00:00 AM	2/1/2004 12:00:00 AM	Roundup Compressor Station	Gas Comp #3 (E002)	5.00	0.03			
2/1/2004 12:00:00 AM	3/1/2004 12:00:00 AM	Roundup Compressor Station	Gas Comp #3 (E002)	0.00	0.03			
3/1/2004 12:00:00 AM	4/1/2004 12:00:00 AM	Roundup Compressor Station	Gas Comp #3 (E002)	186.00	1.30			
4/1/2004 12:00:00 AM	5/1/2004 12:00:00 AM	Roundup Compressor Station	Gas Comp #3 (E002)	125.00	0.87			
5/1/2004 12:00:00 AM	6/1/2004 12:00:00 AM	Roundup Compressor Station	Gas Comp #3 (E002)	659.00	4.48			
6/1/2004 12:00:00 AM	7/1/2004 12:00:00 AM	Roundup Compressor Station	Gas Comp #3 (E002)	0.00	0.00			
7/1/2004 12:00:00 AM	8/1/2004 12:00:00 AM	Roundup Compressor Station	Gas Comp #3 (E002)	97.00	0.60			
8/1/2004 12:00:00 AM	9/1/2004 12:00:00 AM	Roundup Compressor Station	Gas Comp #3 (E002)	724.00	5.00			
9/1/2004 12:00:00 AM	10/1/2004 12:00:00 AM	Roundup Compressor Station	Gas Comp #3 (E002)	720.00	5.00		21.55	
10/1/2004 12:00:00 AM	11/1/2004 12:00:00 AM	Roundup Compressor Station	Gas Comp #3 (E002)	617.00	4.30		21.58	
11/1/2004 12:00:00 AM	12/1/2004 12:00:00 AM	Roundup Compressor Station	Gas Comp #3 (E002)	249.00	1.74		23.32	
12/1/2004 12:00:00 AM	1/1/2005 12:00:00 AM	Roundup Compressor Station	Gas Comp #3 (E002)	0.00	0.00		23.32	
1/1/2005 12:00:00 AM	2/1/2005 12:00:00 AM	Roundup Compressor Station	Gas Comp #3 (E002)	2.00	0.01		23.30	
2/1/2005 12:00:00 AM	3/1/2005 12:00:00 AM	Roundup Compressor Station	Gas Comp #3 (E002)	83.00	0.58		23.88	
3/1/2005 12:00:00 AM	4/1/2005 12:00:00 AM	Roundup Compressor Station	Gas Comp #3 (E002)	382.00	2.60		25.18	
4/1/2005 12:00:00 AM	5/1/2005 12:00:00 AM	Roundup Compressor Station	Gas Comp #3 (E002)	222.00	1.51		25.82	
5/1/2005 12:00:00 AM	6/1/2005 12:00:00 AM	Roundup Compressor Station	Gas Comp #3 (E002)	35.00	0.25		21.59	
6/1/2005 12:00:00 AM	7/1/2005 12:00:00 AM	Roundup Compressor Station	Gas Comp #3 (E002)	0.00	0.00		21.59	
7/1/2005 12:00:00 AM	8/1/2005 12:00:00 AM	Roundup Compressor Station	Gas Comp #3 (E002)	0.00	0.00		20.99	
8/1/2005 12:00:00 AM	9/1/2005 12:00:00 AM	Roundup Compressor Station	Gas Comp #3 (E002)	0.00	0.00		15.99	
10/1/2003 12:00:00 AM	11/1/2003 12:00:00 AM	Roundup Compressor Station	Gas Comp #2 (E003)	409.00	2.86			
11/1/2003 12:00:00 AM	12/1/2003 12:00:00 AM	Roundup Compressor Station	Gas Comp #2 (E003)	6.00	0.04			
12/1/2003 12:00:00 AM	1/1/2004 12:00:00 AM	Roundup Compressor Station	Gas Comp #2 (E003)	0.00	0.00			
1/1/2004 12:00:00 AM	2/1/2004 12:00:00 AM	Roundup Compressor Station	Gas Comp #2 (E003)	6.00	0.04			
2/1/2004 12:00:00 AM	3/1/2004 12:00:00 AM	Roundup Compressor Station	Gas Comp #2 (E003)	278.00	1.95			
3/1/2004 12:00:00 AM	4/1/2004 12:00:00 AM	Roundup Compressor Station	Gas Comp #2 (E003)	415.00	2.90			
4/1/2004 12:00:00 AM	5/1/2004 12:00:00 AM	Roundup Compressor Station	Gas Comp #2 (E003)	298.00	2.08			
5/1/2004 12:00:00 AM	6/1/2004 12:00:00 AM	Roundup Compressor Station	Gas Comp #2 (E003)	0.00	0.00			
6/1/2004 12:00:00 AM	7/1/2004 12:00:00 AM	Roundup Compressor Station	Gas Comp #2 (E003)	1.00	0.01			
7/1/2004 12:00:00 AM	8/1/2004 12:00:00 AM	Roundup Compressor Station	Gas Comp #2 (E003)	22.00	0.13			
8/1/2004 12:00:00 AM	9/1/2004 12:00:00 AM	Roundup Compressor Station	Gas Comp #2 (E003)	143.00	1.00			
9/1/2004 12:00:00 AM	10/1/2004 12:00:00 AM	Roundup Compressor Station	Gas Comp #2 (E003)	256.00	1.70		12.71	
10/1/2004 12:00:00 AM	11/1/2004 12:00:00 AM	Roundup Compressor Station	Gas Comp #2 (E003)	510.00	3.50		13.35	
11/1/2004 12:00:00 AM	12/1/2004 12:00:00 AM	Roundup Compressor Station	Gas Comp #2 (E003)	198.00	1.38		14.69	
12/1/2004 12:00:00 AM	1/1/2005 12:00:00 AM	Roundup Compressor Station	Gas Comp #2 (E003)	0.00	0.00		14.69	
1/1/2005 12:00:00 AM	2/1/2005 12:00:00 AM	Roundup Compressor Station	Gas Comp #2 (E003)	2.00	0.01		14.66	
2/1/2005 12:00:00 AM	3/1/2005 12:00:00 AM	Roundup Compressor Station	Gas Comp #2 (E003)	133.00	0.93		13.64	
3/1/2005 12:00:00 AM	4/1/2005 12:00:00 AM	Roundup Compressor Station	Gas Comp #2 (E003)	362.00	2.46		13.20	
4/1/2005 12:00:00 AM	5/1/2005 12:00:00 AM	Roundup Compressor Station	Gas Comp #2 (E003)	0.00	0.00		11.12	
5/1/2005 12:00:00 AM	6/1/2005 12:00:00 AM	Roundup Compressor Station	Gas Comp #2 (E003)	0.00	0.00		11.12	
6/1/2005 12:00:00 AM	7/1/2005 12:00:00 AM	Roundup Compressor Station	Gas Comp #2 (E003)	0.00	0.00		11.11	
7/1/2005 12:00:00 AM	8/1/2005 12:00:00 AM	Roundup Compressor Station	Gas Comp #2 (E003)	0.00	0.00		10.98	
8/1/2005 12:00:00 AM	9/1/2005 12:00:00 AM	Roundup Compressor Station	Gas Comp #2 (E003)	454.00	2.90		12.88	
10/1/2003 12:00:00 AM	11/1/2003 12:00:00 AM	Roundup Compressor Station	Gas Comp #1 (E004)	410.00	2.87			
11/1/2003 12:00:00 AM	12/1/2003 12:00:00 AM	Roundup Compressor Station	Gas Comp #1 (E004)	7.00	0.05			
12/1/2003 12:00:00 AM	1/1/2004 12:00:00 AM	Roundup Compressor Station	Gas Comp #1 (E004)	0.00	0.00			
1/1/2004 12:00:00 AM	2/1/2004 12:00:00 AM	Roundup Compressor Station	Gas Comp #1 (E004)	3.00	0.02			
2/1/2004 12:00:00 AM	3/1/2004 12:00:00 AM	Roundup Compressor Station	Gas Comp #1 (E004)	219.00	1.53			
3/1/2004 12:00:00 AM	4/1/2004 12:00:00 AM	Roundup Compressor Station	Gas Comp #1 (E004)	442.00	3.00			
4/1/2004 12:00:00 AM	5/1/2004 12:00:00 AM	Roundup Compressor Station	Gas Comp #1 (E004)	305.00	2.13			
5/1/2004 12:00:00 AM	6/1/2004 12:00:00 AM	Roundup Compressor Station	Gas Comp #1 (E004)	657.00	4.46			
6/1/2004 12:00:00 AM	7/1/2004 12:00:00 AM	Roundup Compressor Station	Gas Comp #1 (E004)	7.00	0.05			
7/1/2004 12:00:00 AM	8/1/2004 12:00:00 AM	Roundup Compressor Station	Gas Comp #1 (E004)	260.00	1.61			
8/1/2004 12:00:00 AM	9/1/2004 12:00:00 AM	Roundup Compressor Station	Gas Comp #1 (E004)	380.00	2.60			
9/1/2004 12:00:00 AM	10/1/2004 12:00:00 AM	Roundup Compressor Station	Gas Comp #1 (E004)	345.00	2.40		20.72	
10/1/2004 12:00:00 AM	11/1/2004 12:00:00 AM	Roundup Compressor Station	Gas Comp #1 (E004)	422.00	2.90		20.75	
11/1/2004 12:00:00 AM	12/1/2004 12:00:00 AM	Roundup Compressor Station	Gas Comp #1 (E004)	94.00	0.65		21.35	
12/1/2004 12:00:00 AM	1/1/2005 12:00:00 AM	Roundup Compressor Station	Gas Comp #1 (E004)	0.00	0.00		21.35	
1/1/2005 12:00:00 AM	2/1/2005 12:00:00 AM	Roundup Compressor Station	Gas Comp #1 (E004)	2.00	0.01		21.34	
2/1/2005 12:00:00 AM	3/1/2005 12:00:00 AM	Roundup Compressor Station	Gas Comp #1 (E004)	395.00	2.77		22.58	
3/1/2005 12:00:00 AM	4/1/2005 12:00:00 AM	Roundup Compressor Station	Gas Comp #1 (E004)	734.00	4.99		24.57	
4/1/2005 12:00:00 AM	5/1/2005 12:00:00 AM	Roundup Compressor Station	Gas Comp #1 (E004)	81.00	0.55		22.99	
5/1/2005 12:00:00 AM	6/1/2005 12:00:00 AM	Roundup Compressor Station	Gas Comp #1 (E004)	54.00	0.38		18.91	
6/1/2005 12:00:00 AM	7/1/2005 12:00:00 AM	Roundup Compressor Station	Gas Comp #1 (E004)	0.00	0.00		18.86	
7/1/2005 12:00:00 AM	8/1/2005 12:00:00 AM	Roundup Compressor Station	Gas Comp #1 (E004)	0.00	0.00		17.25	
8/1/2005 12:00:00 AM	9/1/2005 12:00:00 AM	Roundup Compressor Station	Gas Comp #1 (E004)	464.00	3.00		17.65	

ROUNDUP DEHYDRATOR MONTHLY OPERATING PARAMETERS

Begin Date	End Date	Facility Name	Name	Natural Gas Throughput (mmscf)	Hours of Operation (hr)	Number of Operating Days (day)	Glycol Consumption (gal)	Glycol Recirculation Rate (gpm)	Wet Gas Pressure (psig)	Wet Gas Temperature (deg F)	Wet Gas Water Content (lb H2O/MMscf)	Dry Gas Water Content (lb H2O/MMscf)	Gas Processed (mmscf/day)	Stripping Gas Flow Rate (scfm)	EG Condenser Temperature (deg F)	Flash Tank Pressure (psi)	Flash Tank Temperature (deg F)	EG Condenser Pressure (psig)
9/1/2004 12:00:00 AM	10/1/2004 12:00:00 AM	Roundup Compressor Station	TEG Dehydrator (D001)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
10/1/2004 12:00:00 AM	11/1/2004 12:00:00 AM	Roundup Compressor Station	TEG Dehydrator (D001)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
11/1/2004 12:00:00 AM	12/1/2004 12:00:00 AM	Roundup Compressor Station	TEG Dehydrator (D001)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
12/1/2004 12:00:00 AM	1/1/2005 12:00:00 AM	Roundup Compressor Station	TEG Dehydrator (D001)	192.99	720.00	30.00	0.00	0.90	731.00	64.00	14.00	0.5 - 1.5	6.43	2.00				
1/1/2005 12:00:00 AM	2/1/2005 12:00:00 AM	Roundup Compressor Station	TEG Dehydrator (U001)	228.92	456.00	19.00	0.00	0.86	725.00	65.00	0.11	0.5 - 1.5	12.05	2.00				
2/1/2005 12:00:00 AM	3/1/2005 12:00:00 AM	Roundup Compressor Station	TEG Dehydrator (U001)	237.68	672.00	28.00	0.00	0.83	666.00	69.00	0.11	0.5 - 1.5	8.49	2.00				
3/1/2005 12:00:00 AM	4/1/2005 12:00:00 AM	Roundup Compressor Station	TEG Dehydrator (D001)	278.39	744.00	31.00	0.00	0.83	669.00	70.60	0.11	0.5 - 1.5	8.92	2.00				
4/1/2005 12:00:00 AM	5/1/2005 12:00:00 AM	Roundup Compressor Station	TEG Dehydrator (D001)	48.16	264.00	11.00	0.00	0.79	766.00	54.00	0.11	0.5 - 1.5	4.38	2.00				
5/1/2005 12:00:00 AM	6/1/2005 12:00:00 AM	Roundup Compressor Station	TEG Dehydrator (D001)	18.06	57.00	2.33	0.00	0.75	670.00	78.00	0.11	0.5 - 1.5	7.75	2.00				
6/1/2005 12:00:00 AM	7/1/2005 12:00:00 AM	Roundup Compressor Station	TEG Dehydrator (U001)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.5 - 1.5	0.00	0.00				
7/1/2005 12:00:00 AM	8/1/2005 12:00:00 AM	Roundup Compressor Station	TEG Dehydrator (D001)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.5 - 1.5	0.00	0.00				
8/1/2005 12:00:00 AM	9/1/2005 12:00:00 AM	Roundup Compressor Station	TEG Dehydrator (D001)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.5 - 1.5	0.00	0.00				
9/1/2004 12:00:00 AM	10/1/2004 12:00:00 AM	Roundup Compressor Station	EG Dehydrator (D003)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.5 - 3.0	0.00	0.00	0.00	0.00	0.00	0.00
10/1/2004 12:00:00 AM	11/1/2004 12:00:00 AM	Roundup Compressor Station	EG Dehydrator (D003)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.5 - 3.0	0.00	0.00	0.00	0.00	0.00	0.00
11/1/2004 12:00:00 AM	12/1/2004 12:00:00 AM	Roundup Compressor Station	EG Dehydrator (D003)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.5 - 3.0	0.00	0.00	0.00	0.00	0.00	0.00
12/1/2004 12:00:00 AM	1/1/2005 12:00:00 AM	Roundup Compressor Station	EG Dehydrator (D003)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.5 - 3.0	0.00	0.00	0.00	0.00	0.00	0.00
1/1/2005 12:00:00 AM	2/1/2005 12:00:00 AM	Roundup Compressor Station	EG Dehydrator (D003)	260.00	288.00	12.00	0.00	3.50	741.00	77.00	14.00	1.5 - 3.0	21.67	0.00	-21.50	45.00	100.00	741.00
2/1/2005 12:00:00 AM	3/1/2005 12:00:00 AM	Roundup Compressor Station	EG Dehydrator (D003)	475.36	648.00	27.00	0.00	3.50	686.00	80.00	14.00	1.5 - 3.0	17.61	0.00	-21.25	45.00	125.00	686.00
3/1/2005 12:00:00 AM	4/1/2005 12:00:00 AM	Roundup Compressor Station	EG Dehydrator (D003)	552.77	724.00	30.00	0.00	3.50	681.00	82.00	14.00	1.5 - 3.0	18.43	0.00	-19.40	45.00	125.00	681.00
4/1/2005 12:00:00 AM	5/1/2005 12:00:00 AM	Roundup Compressor Station	EG Dehydrator (D003)	96.31	264.00	11.00	0.00	3.50	756.00	68.00	14.00	1.5 - 3.0	8.76	0.00	-21.00	45.00	125.00	756.00
5/1/2005 12:00:00 AM	6/1/2005 12:00:00 AM	Roundup Compressor Station	EG Dehydrator (D003)	36.11	57.00	2.33	0.00	3.50	694.00	95.00	14.00	1.5 - 3.0	15.50	0.00	-20.00	45.00	125.00	694.00
6/1/2005 12:00:00 AM	7/1/2005 12:00:00 AM	Roundup Compressor Station	EG Dehydrator (D003)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.5 - 3.0	0.00	0.00	0.00	0.00	0.00	0.00
7/1/2005 12:00:00 AM	8/1/2005 12:00:00 AM	Roundup Compressor Station	EG Dehydrator (D003)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.5 - 3.0	0.00	0.00	0.00	0.00	0.00	0.00
8/1/2005 12:00:00 AM	9/1/2005 12:00:00 AM	Roundup Compressor Station	EG Dehydrator (D003)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.5 - 3.0	0.00	0.00	0.00	0.00	0.00	0.00
9/1/2004 12:00:00 AM	10/1/2004 12:00:00 AM	Roundup Compressor Station	TEG Dehydrator (D002)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.5 - 1.5	0.00	0.00				
10/1/2004 12:00:00 AM	11/1/2004 12:00:00 AM	Roundup Compressor Station	TEG Dehydrator (D002)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.5 - 1.5	0.00	0.00				
11/1/2004 12:00:00 AM	12/1/2004 12:00:00 AM	Roundup Compressor Station	TEG Dehydrator (D002)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.5 - 1.5	0.00	0.00				
12/1/2004 12:00:00 AM	1/1/2005 12:00:00 AM	Roundup Compressor Station	TEG Dehydrator (D002)	192.99	720.00	30.00	0.00	0.90	731.00	64.00	14.00	0.5 - 1.5	6.43	2.00				
1/1/2005 12:00:00 AM	2/1/2005 12:00:00 AM	Roundup Compressor Station	TEG Dehydrator (U002)	228.92	456.00	19.00	0.00	0.83	725.00	65.00	0.11	0.5 - 1.5	12.05	2.10				
2/1/2005 12:00:00 AM	3/1/2005 12:00:00 AM	Roundup Compressor Station	TEG Dehydrator (D002)	237.68	672.00	28.00	0.00	0.83	666.00	69.00	0.11	0.5 - 1.5	8.49	2.10				
3/1/2005 12:00:00 AM	4/1/2005 12:00:00 AM	Roundup Compressor Station	TEG Dehydrator (U002)	278.39	744.00	31.00	0.00	0.83	669.00	70.60	0.11	0.5 - 1.5	8.92	2.10				
4/1/2005 12:00:00 AM	5/1/2005 12:00:00 AM	Roundup Compressor Station	TEG Dehydrator (D002)	48.16	264.00	11.00	0.00	0.83	766.00	54.00	0.11	0.5 - 1.5	4.38	2.10				
5/1/2005 12:00:00 AM	6/1/2005 12:00:00 AM	Roundup Compressor Station	TEG Dehydrator (U002)	18.06	57.00	2.33	0.00	0.83	670.00	78.00	0.11	0.5 - 1.5	7.75	2.00				
6/1/2005 12:00:00 AM	7/1/2005 12:00:00 AM	Roundup Compressor Station	TEG Dehydrator (U002)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.5 - 1.5	0.00	0.00				
7/1/2005 12:00:00 AM	8/1/2005 12:00:00 AM	Roundup Compressor Station	TEG Dehydrator (U002)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.5 - 1.5	0.00	0.00				
8/1/2005 12:00:00 AM	9/1/2005 12:00:00 AM	Roundup Compressor Station	TEG Dehydrator (D002)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.5 - 1.5	0.00	0.00				

PUBLIC SERVICE COMPANY OF COLORADO

AVERAGE ANNUAL GAS ANALYSES

2004 Average Gas Analysis Data*

Btu Zone	Bayfield	Brush	Burns WY	Cheyenne WY	Denver	Ft. St. Vrain	Grand Junction	Grease-wood	Merino	Mountain	Northern	Pueblo	Rifle-Vail	Southern	Sterling
COMPONENT	Mol %	Mol %	Mol %	Mol %	Mol %	Mol %	Mol %	Mol %	Mol %	Mol %	Mol %	Mol %	Mol %	Mol %	Mol %
Carbon Dioxide	3.131	1.317	1.606	1.649	2.133	2.197	3.652	1.740	0.390	2.570	2.401	1.118	2.182	3.785	0.469
Oxygen	0.000	0.000	0.000	0.000	1.130	0.000	0.000	0.000	0.000	1.048	0.000	0.635	0.000	0.000	0.000
Nitrogen	0.097	2.218	0.604	0.937	5.377	2.395	2.965	1.734	0.344	4.461	0.573	4.679	0.098	0.034	3.475
Methane	95.581	91.679	92.589	92.623	84.985	92.940	88.082	85.427	96.954	87.248	87.321	89.775	88.907	95.760	94.089
Ethane	1.045	3.898	4.287	3.748	5.365	1.896	3.775	6.673	1.899	3.735	8.276	3.034	6.447	0.361	0.984
Propane	0.109	0.590	0.650	0.719	0.780	0.384	0.904	3.038	0.267	0.699	1.196	0.575	1.675	0.039	0.513
i-Butane	0.019	0.088	0.084	0.104	0.076	0.061	0.171	0.540	0.047	0.093	0.079	0.054	0.295	0.007	0.132
n-Butane	0.010	0.101	0.085	0.116	0.092	0.070	0.217	0.598	0.054	0.094	0.103	0.079	0.244	0.006	0.146
i-Pentane	0.004	0.026	0.030	0.040	0.022	0.023	0.081	0.113	0.016	0.026	0.015	0.017	0.067	0.003	0.054
n-Pentane	0.000	0.010	0.021	0.030	0.017	0.020	0.057	0.067	0.013	0.018	0.009	0.014	0.043	0.001	0.033
Hexanes Plus	0.004	0.013	0.044	0.034	0.023	0.014	0.096	0.070	0.016	0.008	0.027	0.020	0.042	0.004	0.105
TOTAL:	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

GAS PROPERTIES* (Reference conditions: 14.73 psia, 60°F, dry)

Lower Heating Value (Btu/cf):	893.8	923.6	939.7	934.6	889.3	894.9	908.3	1004.3	927.5	881.6	968.0	888.8	978.5	882.2	903.6
Higher Heating Value (Btu/cf):	992.3	1024.1	1041.8	1036.2	985.5	992.9	1006.6	1110.6	1029.3	977.5	1071.8	985.7	1083.4	979.6	1002.5
Specific Gravity:	0.5923	0.6063	0.6046	0.6053	0.6414	0.6020	0.6403	0.6629	0.5743	0.6327	0.6362	0.6119	0.6352	0.5941	0.5918
Wobbe Index:	1289	1315	1340	1332	1231	1280	1258	1364	1358	1229	1344	1260	1359	1271	1303
% Oxygen + Nitrogen	0.097	2.218	0.604	0.937	6.507	2.395	2.965	1.734	0.344	5.509	0.573	5.314	0.098	0.034	3.539
Max. Liquids (gal/Mcf):	0.043	0.255	0.271	0.309	0.293	0.170	0.464	1.300	0.123	0.273	0.409	0.221	0.694	0.018	0.306
Specific Heat Ratio:	1.304	1.297	1.295	1.296	1.297	1.302	1.294	1.277	1.302	1.300	1.287	1.302	1.285	1.306	1.302

*Average properties for calendar year may differ from zone averages based on averages of billing quarters.

Begin Date	End Date	Facility Name	Name	Fuel Used - Gas	
10/1/2003 12:00:00 AM	11/1/2003 12:00:00 AM	Roundup Compressor Station	PropaneCompressor(E001)	0.00	
11/1/2003 12:00:00 AM	12/1/2003 12:00:00 AM	Roundup Compressor Station	PropaneCompressor(E001)	0.00	
12/1/2003 12:00:00 AM	1/1/2004 12:00:00 AM	Roundup Compressor Station	PropaneCompressor(E001)	0.00	
1/1/2004 12:00:00 AM	2/1/2004 12:00:00 AM	Roundup Compressor Station	PropaneCompressor(E001)	0.23	
2/1/2004 12:00:00 AM	3/1/2004 12:00:00 AM	Roundup Compressor Station	PropaneCompressor(E001)	0.25	
3/1/2004 12:00:00 AM	4/1/2004 12:00:00 AM	Roundup Compressor Station	PropaneCompressor(E001)	0.18	
4/1/2004 12:00:00 AM	5/1/2004 12:00:00 AM	Roundup Compressor Station	PropaneCompressor(E001)	0.12	
5/1/2004 12:00:00 AM	6/1/2004 12:00:00 AM	Roundup Compressor Station	PropaneCompressor(E001)	0.23	
6/1/2004 12:00:00 AM	7/1/2004 12:00:00 AM	Roundup Compressor Station	PropaneCompressor(E001)	0.00	
7/1/2004 12:00:00 AM	8/1/2004 12:00:00 AM	Roundup Compressor Station	PropaneCompressor(E001)	0.00	
8/1/2004 12:00:00 AM	9/1/2004 12:00:00 AM	Roundup Compressor Station	PropaneCompressor(E001)	0.00	
9/1/2004 12:00:00 AM	10/1/2004 12:00:00 AM	Roundup Compressor Station	PropaneCompressor(E001)	0.00	1.02
10/1/2004 12:00:00 AM	11/1/2004 12:00:00 AM	Roundup Compressor Station	PropaneCompressor(E001)	0.00	1.02
11/1/2004 12:00:00 AM	12/1/2004 12:00:00 AM	Roundup Compressor Station	PropaneCompressor(E001)	0.00	1.02
12/1/2004 12:00:00 AM	1/1/2005 12:00:00 AM	Roundup Compressor Station	PropaneCompressor(E001)	0.00	1.02
1/1/2005 12:00:00 AM	2/1/2005 12:00:00 AM	Roundup Compressor Station	PropaneCompressor(E001)	0.11	0.85
2/1/2005 12:00:00 AM	3/1/2005 12:00:00 AM	Roundup Compressor Station	PropaneCompressor(E001)	0.21	0.86
3/1/2005 12:00:00 AM	4/1/2005 12:00:00 AM	Roundup Compressor Station	PropaneCompressor(E001)	0.26	0.94
4/1/2005 12:00:00 AM	5/1/2005 12:00:00 AM	Roundup Compressor Station	PropaneCompressor(E001)	0.03	0.90
5/1/2005 12:00:00 AM	6/1/2005 12:00:00 AM	Roundup Compressor Station	PropaneCompressor(E001)	0.01	0.68
6/1/2005 12:00:00 AM	7/1/2005 12:00:00 AM	Roundup Compressor Station	PropaneCompressor(E001)	0.00	0.68
7/1/2005 12:00:00 AM	8/1/2005 12:00:00 AM	Roundup Compressor Station	PropaneCompressor(E001)	0.00	0.65
8/1/2005 12:00:00 AM	9/1/2005 12:00:00 AM	Roundup Compressor Station	PropaneCompressor(E001)	0.00	0.65
10/1/2003 12:00:00 AM	11/1/2003 12:00:00 AM	Roundup Compressor Station	Gas Comp #3 (E002)	4.27	
11/1/2003 12:00:00 AM	12/1/2003 12:00:00 AM	Roundup Compressor Station	Gas Comp #3 (E002)	0.00	
12/1/2003 12:00:00 AM	1/1/2004 12:00:00 AM	Roundup Compressor Station	Gas Comp #3 (E002)	0.00	
1/1/2004 12:00:00 AM	2/1/2004 12:00:00 AM	Roundup Compressor Station	Gas Comp #3 (E002)	0.03	
2/1/2004 12:00:00 AM	3/1/2004 12:00:00 AM	Roundup Compressor Station	Gas Comp #3 (E002)	0.00	
3/1/2004 12:00:00 AM	4/1/2004 12:00:00 AM	Roundup Compressor Station	Gas Comp #3 (E002)	1.30	
4/1/2004 12:00:00 AM	5/1/2004 12:00:00 AM	Roundup Compressor Station	Gas Comp #3 (E002)	0.87	
5/1/2004 12:00:00 AM	6/1/2004 12:00:00 AM	Roundup Compressor Station	Gas Comp #3 (E002)	4.48	
6/1/2004 12:00:00 AM	7/1/2004 12:00:00 AM	Roundup Compressor Station	Gas Comp #3 (E002)	0.00	
7/1/2004 12:00:00 AM	8/1/2004 12:00:00 AM	Roundup Compressor Station	Gas Comp #3 (E002)	0.60	
8/1/2004 12:00:00 AM	9/1/2004 12:00:00 AM	Roundup Compressor Station	Gas Comp #3 (E002)	5.00	
9/1/2004 12:00:00 AM	10/1/2004 12:00:00 AM	Roundup Compressor Station	Gas Comp #3 (E002)	5.00	21.55
10/1/2004 12:00:00 AM	11/1/2004 12:00:00 AM	Roundup Compressor Station	Gas Comp #3 (E002)	4.30	21.56
11/1/2004 12:00:00 AM	12/1/2004 12:00:00 AM	Roundup Compressor Station	Gas Comp #3 (E002)	1.74	23.32
12/1/2004 12:00:00 AM	1/1/2005 12:00:00 AM	Roundup Compressor Station	Gas Comp #3 (E002)	0.00	23.32
1/1/2005 12:00:00 AM	2/1/2005 12:00:00 AM	Roundup Compressor Station	Gas Comp #3 (E002)	0.01	23.30
2/1/2005 12:00:00 AM	3/1/2005 12:00:00 AM	Roundup Compressor Station	Gas Comp #3 (E002)	0.59	23.86
3/1/2005 12:00:00 AM	4/1/2005 12:00:00 AM	Roundup Compressor Station	Gas Comp #3 (E002)	2.60	25.18
4/1/2005 12:00:00 AM	5/1/2005 12:00:00 AM	Roundup Compressor Station	Gas Comp #3 (E002)	1.51	25.82
5/1/2005 12:00:00 AM	6/1/2005 12:00:00 AM	Roundup Compressor Station	Gas Comp #3 (E002)	0.25	21.55
6/1/2005 12:00:00 AM	7/1/2005 12:00:00 AM	Roundup Compressor Station	Gas Comp #3 (E002)	0.00	21.55
7/1/2005 12:00:00 AM	8/1/2005 12:00:0				

Monthly

12 month Rolling avg
mmsec/yr



"Wyatt, Ron"
<Ron.Wyatt@XCELENERGY.COM>

10/13/2005 06:59 AM

To Emilio Llamozas/ENF/R8/USEPA/US

cc "King, Robert E" <Robert.King@XCELENERGY.COM>

bcc

Subject NGL Start/Stop Log

Emilio,

I am sorry it has taken so long to get this to you. To date I have not been able to print this information off the computer. We are continuing to work toward that end, but I didn't want you to have to wait any longer. I am including all of last season's withdrawal log so you can get a better feel for how we operate. Please feel free to stop in and look at this information on our computer. Here is the log information:

12/1/2004. Started free-flow withdrawal.
12/9/2004. Shut-in withdrawal per Gas Load.
12/13/2004. Started free-flow withdrawal.
12/17/2004. Shut-in withdrawal per Gas Load.
12/20/2004. Start free-flow withdrawal.
12/25/2004. Shut-in withdrawal per Gas Load.
1/3/2005. Start free-flow withdrawal.
1/9/2005. Shut-in withdrawal per Gas Load.
1/11/2005. Start free-flow withdrawal.
1/12/2005. Brought NGL Plant on line at 8:30 am.
1/18/2005. Shut-in withdrawal per Gas Load.
1/26/2005. Start free-flow withdrawal and brought on NGL Plant.
2/7/2005. Start using compression for withdrawal.
2/20/2005. Shut-in withdrawal per Gas Load.
2/22/2005. Start compression withdrawal and brought on NGL Plant.
4/8/2005. Shut-in withdrawal per Gas Load.
4/28/2005. Start compression withdrawal and brought on NGL Plant.
5/3/2005. Shut-in withdrawal per Gas Load. End of season.

If you have any questions, feel free to contact me. Thanks.

Ron Wyatt

STATE OF COLORADO

Bill Owens, Governor
Douglas H. Benavente, Executive Director

Dedicated to protecting and improving the health and environment of the people of Colorado

4300 Cherry Creek Dr. S.
Denver, Colorado 80246-1530
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TDD Line (303) 691-7700
Located in Glendale, Colorado
<http://www.cdphs.state.co.us>

Laboratory Services Division
8100 Lowry Blvd.
Denver, Colorado 80230-6928
(303) 692-8090



Colorado Department
of Public Health
and Environment

Air Pollution Control Division

To: EMILIO LIAMOZAS (EPA)
Fax #: 303 312-6191

From: LOUIS MCBRIDE (APCD)
Phone: 303 692-3174
Date: 11-8-05

Our Fax #: 303-782-0278
Verification #: 303-692-3100

Total number of pages (including cover sheet): 9

Comments: FYI - REPORTING PERIODS (web permit)

067-0030

4853 Table Mountain Drive
Golden, Colorado 80403

September 19, 2005

Mr. James A. King
Colorado Department of Public Health and Environment
Air Pollution Control Division
APCD-SSP-B1
4300 Cherry Creek Drive South
Denver, CO. 80246-1530

Subject: Roundup Compressor Station Operating Permit No. 95OPMR081
Semi-Annual Monitoring and Permit Deviation Report
Annual Compliance Certification Report
Semi-Annual Volatile Organic Compound Monitoring Report

Dear Mr. King,

Enclosed are the Semi-Annual Monitoring and Permit Deviation Report and the Annual Compliance Certification Report for the Public Service Company of Colorado (PSCo) Roundup Compressor Station.

Also enclosed is the Semi-Annual Volatile Organic Compound Monitoring Report submitted in accordance with the requirements of 40 CFR Part 60.636 of Subpart KKK, Standards of Performance for Equipment Leaks of VOC from Onshore Natural Gas Processing Plants.

If you have any questions concerning these reports, please contact me at 720-497-2114.

Sincerely,

Robert E. King
Environmental Coordinator

Enclosures.

cc: U.S. EPA Region VIII, Office of Enf., Compl., and Env. Justice - Annual Report Only
Dean Jensen
Eldon Lindt
ES File

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Roundup Annual Compliance Certification Report

FACILITY NAME: Public Service Company - Roundup Compressor Station
 OPERATING PERMIT NO: 95OPMR081
 REPORTING PERIOD: September 1, 2004 - August 31, 2005

I. Facility Status

X During the entire reporting period, this source was in compliance with ALL terms and conditions contained in the Permit, each term and condition of which is identified and included by this reference. The method(s) used to determine compliance is/are the method(s) specified in the Permit.

___ With the possible exception of the deviations identified in the table below, this source was in compliance with all terms and conditions contained in the Permit, each term and condition of which is identified and included by this reference, during the entire reporting period. The method used to determine compliance for each term and condition is the method specified in the Permit, unless otherwise indicated and described in the deviation report(s). Note that not all deviations are considered violations.

Operating Permit Unit ID	Unit Description	Deviations Reported ¹		Monitoring Method per Permit? ²		Was Compliance Continuous or Intermittent? ³		Was Data Continuous? ⁴	
		Previous	Current	YES	NO	Continuous	Intermittent	YES	NO
E001	Ajax, Model DPC-380, 2-Cycle Internal Combustion Engine (Refrigerant Compressor Engine), Rated at 225 HP (Site), Serial No. 77939. Natural Gas Fired.			X		X			X
E002, E003 and E004	Three (3) Waukesha, Model LS790Q81, 4-Cycle Internal Combustion Engines (Compressor Engines), Each Rated at 980 HP (Site), Serial Nos. 397616, 397617 and 397618. Natural Gas Fired.			X		X			X
D001 and D002	Two (2) J. W. Williams, Trichlylene Glycol Dehydrators, Model and Serial Nos. 801-1 and 801-2, Each Rated at 25 mmSCF/day.			X		X			X
D003	T. H. Russell, Model B-411, Ethylene Glycol Dehydrator, Serial No. Unavailable, Rated at 50 mmSCF/day.			X		X			X
F001	Fugitive VOC Emissions from Equipment Leaks			X		X			X
I001	Elastec Inc., Smart Ash Energy Recovery Unit, Model No. 100, Serial No. Unavailable. Note this is a portable unit with an AIRs identification number of 7771171.			X		X			X
	General Conditions			X		X			X
	Insignificant Activities ⁴			X		X			X

¹ If deviations were noted in the previous deviation report (i.e. for the first six months of the annual reporting period), put an ☒ under ☐previous☐. If deviations were noted in the current deviation report (i.e. for the last six months of the annual reporting period), put an ☒ under ☐current☐. Mark both columns if both apply.

² Note whether the method(s) used to determine the compliance status with each term and condition was the method(s) specified in the permit. If it was not, mark "no" and attach additional information/explanation.

³ Note whether the compliance status with each term and condition provided was continuous or intermittent. ☐Intermittent Compliance☐ can mean either that noncompliance has occurred or that the owner or operator has data sufficient to certify compliance only on an intermittent basis. Certification of intermittent compliance does not necessarily mean that any noncompliance has occurred.

⁴ Note whether the method(s) used to determine the compliance status with each term and condition provided continuous or intermittent data.

⁵ Compliance status for these sources shall be based on a reasonable inquiry using readily available information.

II. Status for Accidental Release Prevention Program:

A. This facility is subject to the provisions of the Accidental Release Prevention Program (Section 112(r) of the Federal Clean Air Act).


B. The facility is in compliance with all the requirements of section 112(r).

1. A Risk Management Plan has been submitted to the appropriate authority and/or the designated central location by the required date.

III. Certification

I have reviewed this certification in its entirety and, based on information and belief formed after reasonable inquiry, I certify that the statements and information contained in this certification are true, accurate and complete.

Please note that the Colorado Statutes state that any person who knowingly, as defined in . 18-1-501(6), C.R.S., makes any false material statement, representation, or certification in this document is guilty of a misdemeanor and may be punished in accordance with the provisions of . 25-7-122.1, C.R.S.

Typed Name of Responsible Official:	William L. Kaphing
Signature:	
Title:	Director, Gas Delivery Services
Date Signed:	9-13-05

Roundup Semi- Annual Monitoring and Permit Deviation Report

Part I

FACILITY NAME: Public Service Company of Colorado - Roundup Compressor Station
OPERATING PERMIT NO: 95OPMR081
REPORTING PERIOD: March 1, 2005 - August 31, 2005

Operating Permit Unit ID	Unit Description	Deviations noted During Period ¹		Deviation Code ²	Upset/Emergency Condition Reported During Period?	
		YES	NO		YES	NO
E001	Ajax, Model DPC-280, 2-Cycle Internal Combustion Engine (Refrigerant Compressor Engine), Rated at 225 HP (Site), Serial No. 77939. Natural Gas Fired.		X			X
E002, E003 and E004	Three (3) Waukesha, Model L5790GSI, 4-Cycle Internal Combustion Engines (Compressor Engines), Each Rated at 980 HP (Site), Serial Nos. 397616, 397617 and 397618. Natural Gas Fired		X			X
D001 and D002	Two (2) J. W. Williams, Triethylene Glycol Dehydrators, Model and Serial Nos. 801-1 and 801-2. Each Rated at 25 mmSCF/day.		X			X
D003	T. H. Russel, Model V-411, Ethylene Glycol Dehydrator, Serial No. Unavailable, Rated at 50 mmSCF/day.		X			X
F001	Fugitive VOC Emissions from Equipment Leaks		X			X
I001	Elastec Inc, Smart Ash Energy Recovery Unit, Model No. 100, Serial No. Unavailable. Note this is a portable unit with an AIRs identification number of 7771171.		X			X
	General Conditions		X			X
	Insignificant Activities		X			X

¹ See previous discussion regarding what is considered to be a deviation. Determination of whether or not a deviation has occurred shall be based on a reasonable inquiry using readily available information.

² Use the following entries as appropriate:

1 = Standard: When the requirement is an emission limit or standard

2 = Process: When the requirement is a production/process limit

3 = Monitor: When the requirement is monitoring

4 = Test: When the requirement is testing

5 = Maintenance: When required maintenance is not performed

6 = Record: When the requirement is recordkeeping

7 = Report: When the requirement is reporting

8 = CAM: A situation in which an excursion or exceedance as defined in 40 CFR Part 64 (the Compliance Assurance Monitoring (CAM) Rule) has occurred.

9 = Other: When the deviation is not covered by any of the above categories


**Roundup Monitoring and Permit Deviation Report
Part III****REPORT CERTIFICATION**

SOURCE NAME: Public Service Company of Colorado - Roundup Compressor Station
FACILITY ID NUMBER: 0870030
PERMIT NUMBER: 95OPMR081
REPORTING PERIOD: March 1, 2005 - August 31, 2005

STATEMENT OF COMPLETENESS

I have reviewed the information being submitted in its entirety and, based on information and belief formed after reasonable inquiry, I certify that the statements and information contained in this submittal are true, accurate and complete.

Please note that the Colorado Statutes state that any person who knowingly, as defined in Sub-Section 18-1-501(6), C.R.S., makes any false material statement, representation, or certification in this document is guilty of a misdemeanor and may be punished in accordance with the provisions of Sub-Section 25-7 122.1, C.R.S.

Typed Name of Responsible Official:	William L. Kaphing
Signature:	
Title:	Director, Gas Delivery Services
Date Signed:	9-13-05

Volatile Organic Compound (VOC) Monitoring Report
Public Service Company - Roundup Compressor Station
40 CFR Part 60.636, Subpart KKK
Standards of Performance for Equipment Leaks of VOC
from Onshore Natural Gas Processing Plants

Operating Permit: 95OPMR081

Reporting Period: March 1, 2005 - August 31, 2005

Facility Status:

☒ During the reporting period, there were no leaking valves detected at the Roundup Compressor Station in accordance with the reporting requirements of 40 CFR Part 60.636, Subpart KKK.


☐ There were leaking valves detected at the Roundup Compressor Station in accordance with the reporting requirements of 40 CFR Part 60.636, Subpart KKK as described below:

Process Unit:

Number of Leaking Valves Detected:

Number of Valves that were not repaired:

Summary:

Typed Name of Responsible Official: William L. Kaphing
Signature: 
Title: Director, Gas Delivery Services
Date Signed: 9-13-05

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None
SAD onlyREVISED REPORTS FILE
TS4863 Table Mountain Drive
Golden, Colorado 80403

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February 10, 2005

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Mr. James A. King
Colorado Department of Public Health and Environment
Air Pollution Control Division
APCD-SSP-B1
4300 Cherry Creek Drive South
Denver, CO. 80246-1530

Subject: Roundup Compressor Station Operating Permit No. 95OPMR081
Revised Semi-Annual Monitoring and Permit Deviation Report
Revised Annual Compliance Certification Report

Dear Mr. King,

Enclosed are revised Semi-Annual Monitoring and Permit Deviation and Annual Compliance Certification Reports for the Public Service Company of Colorado (PSCo) Roundup Compressor Station. There was a deviation that PSCo discovered that it might have needed to report during the reporting period November 1, 2003 – February 29, 2004. The deviation concerned natural gas sampling and did not affect any permit limits.

If you have any questions concerning these reports, please contact me at 720-497-2114.

Sincerely,

Robert E. King
Environmental Coordinator

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Enclosures.

cc: U.S. EPA Region VIII, Office of Enf., Compl., and Env. Justice - Annual Report Only
Brian Sulzer
Eldon Lindt
ES File

Roundup Semi- Annual Monitoring and Permit Deviation Report Part I

REVISED FEBRUARY 2, 2005

FACILITY NAME: Public Service Company of Colorado - Roundup Compressor Station
OPERATING PERMIT NO: 95OPMR081
REPORTING PERIOD: November 1, 2003 - February 29, 2004

Operating Permit Unit ID	Unit Description	Deviations noted During Period? ¹		Deviation Code ²	Upset/Emergency Condition Reported During Period?	
		YES	NO		YES	NO
E001	Ajax, Model DPC-280, 2-Cycle Internal Combustion Engine (Refrigerant Compressor Engine), Rated at 225 HP (Site), Serial No. 77939. Natural Gas Fired.		X			X
E002, E003 and E004	Three (3) Waukesha, Model L5790GSI, 4-Cycle Internal Combustion Engines (Compressor Engines), Each Rated at 980 HP (Site), Serial Nos. 397616, 397617 and 397618. Natural Gas Fired		X			X
D001 and D002	Two (2) J. W. Williams, Triethylene Glycol Dehydrators, Model and Serial Nos. 801-1 and 801-2, Each Rated at 25 mmSCF/day.	X		9		X
D003	T. H. Russel, Model V-411, Ethylene Glycol Dehydrator, Serial No. Unavailable, Rated at 50 mmSCF/day.		X			X
F001	Fugitive VOC Emissions from Equipment Leaks		X			X
I001	Elastec Inc, Smart Ash Energy Recovery Unit, Model No. 100, Serial No. Unavailable. Note this is a portable unit with an AIRs identification number of 7771171.		X			X
	General Conditions		X			X
	Insignificant Activities		X			X

¹ See previous discussion regarding what is considered to be a deviation. Determination of whether or not a deviation has occurred shall be based on a reasonable inquiry using readily available information.

² Use the following entries as appropriate:

1 = Standard: When the requirement is an emission limit or standard

2 = Process: When the requirement is a production/process limit

3 = Monitor: When the requirement is monitoring

4 = Test: When the requirement is testing

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6 = Record: When the requirement is recordkeeping

7 = Report: When the requirement is reporting

8 = CAM: A situation in which an excursion or exceedance as defined in 40 CFR Part 64 (the Compliance Assurance Monitoring (CAM) Rule) has occurred.

9 = Other: When the deviation is not covered by any of the above categories